Access DB# 6800H

SEARCH/REQUEST FORM

Scientific and Technical Information Center

 	Requester's Full Name: Ann-M	are Krss	Examiner # : 789 7.2	L Date: 6(4)02
	Art Unit 15 Phone N	lumber 30 <u>5-317(</u>	Serial Number:	091 931, 914
	Mail Box and Bldg/Room Location	- 9630 673 R	Results Format Preferred (ci	rcle): PAPER DISK E-MAI
٠.	If more than one search is submi	itted, please prio	ritize:searches in order o	fineed: Sevente 1, bags
• • •	Please provide a detailed statement of the s	******	******	*******
	Include the elected species or structures, ke	evwords: synonyms, ac	cronyms, and registry numbers	and combine with the concent or
`,.	utility of the invention. Define any terms t known Please attach a copy of the cover s	hat may have a specia heet, pertinent claims.	I meaning. Give examples or re and abstract.	levant citations, authors, etc, if
		, , ,		
	Title of Invention:		1/ 2	-3
	Inventors (please provide full names):	Ngyyon, Ngl	ni Van ; Cannell, D	rvid
.•	Earliest Priority Filing Date: 8	20/200		- -
•	*For Sequence Searches Only* Please includ	e all pertinent informati	ion (parent, child, divisional, or iss	ued patent numbers) along with the
	appropriate seriālinumber.			
	1	0.5.4	I of formula 1	Ω
	Theore search	1 control	Joj Minas de 1	an orines
	in cla	ml		The state of the s
		* - W		
			Thanks !-	en e
			7	and the second s
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	4			•
			•	
Ċ			The same of the same	A profession of the second
)		•
		/ (# 1 # 1	
		ţ ,,	i)	
			·.	*! */*
				.0
		· · · · · · · · · · · · · · · · · · ·		•
	STÄEFLISFONIAV	Type of Search	Vandare and co	st where applicable
	Searcher: Search	NA Sequence (#)	STN 4	
`. :	Searcher, Phone #	AA Sequence (#)	Dialog	X
٠	Searcher Location:	Structure (#)	Questel/Orbit	1.0
	Date Searcher, Picked) Up:	Bibliographic	Dr.Link	
	Date Completed 446/14/0 Q	Litigation	Lexis/Nexis	
	Searcher Prepi& Review Time: 20	Fulltext	Sequence Systems	
	Clerical Prep Time	Patent Family	WWW/Internet	
	Online Time: 35	Other	Other (specify)	· · · · · · · · · · · · · · · · · · ·
				•

=> file reg

FILE 'REGISTRY' ENTERED AT 12:03:34 ON 14 JUN 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 12 JUN 2002 HIGHEST RN 429617-62-9 DICTIONARY FILE UPDATES: 12 JUN 2002 HIGHEST RN 429617-62-9

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 12:03:38 ON 14 JUN 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 14 Jun 2002 VOL 136 ISS 24 FILE LAST UPDATED: 12 Jun 2002 (20020612/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d que

L7

L4 4 SEA FILE=REGISTRY ABB=ON CALCIUM HYDROXIDE/CN OR BARIUM HYDROXIDE/CN OR MAGNESIUM HYDROXIDE/CN OR ALUMINUM HYDROXIDE/CN

L5 1 SEA FILE=REGISTRY ABB=ON "CUPRIC HYDROXIDE"/CN

L6 6 SEA FILE=REGISTRY ABB=ON STRONTIUM HYDROXIDE/CN OR MOLYBDENUM HYDROXIDE/CN OR MANGANESE HYDROXIDE/CN OR ZINC HYDROXIDE/CN OR COBALT HYDROXIDE/CN

11 SEA FILE=REGISTRY ABB=ON (L4 OR L5 OR L6)

L8 1515 SEA FILE=REGISTRY ABB=ON ((CA OR BA OR MG OR AL OR CU OR SR OR MO OR MN OR ZN OR CO)(L)O(L)H)/ELS(L)3/ELC.SUB

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

hydropides claim3

```
KOSS
        09/931914
                                      Page 2
          48595 SEA FILE=HCAPLUS ABB=ON
                                          L7
1.9
L10
            100 SEA FILE=HCAPLUS ABB=ON
                                          L9 AND (HAIR OR KERAT?)
              2 SEA FILE=HCAPLUS ABB=ON
                                          L10 AND LANTHION?
L11
             12 SEA FILE=HCAPLUS ABB=ON
                                          L10 AND RELAX?
L13
          61496 SEA FILE=HCAPLUS ABB=ON
                                          L8
L15
            112 SEA FILE=HCAPLUS ABB=ON
                                          L15 AND (HAIR OR KERAT?)
L16
             13 SEA FILE=HCAPLUS ABB=ON
                                           L16 AND (RELAX? OR LANTHIO?)
L17
             13 SEA FILE=HCAPLUS ABB=ON
                                          L11 OR L13 OR L17
L18
            112 SEA FILE=HCAPLUS ABB=ON
                                          L10 OR L16
L19
             55 SEA FILE=HCAPLUS ABB=ON
                                          L19 AND (COMPOSITION? OR COMPNS)
L20
             34 SEA FILE=HCAPLUS ABB=ON
                                          L20 AND COSMETIC?/SC,SX
L21
             40 SEA FILE=HCAPLUS ABB=ON
                                          L20 AND (HAIR OR KERAT? (3A) FIBER?)
L22
                                           L21 AND L22
L23
             30 SEA FILE=HCAPLUS ABB=ON
             11 SEA FILE=HCAPLUS ABB=ON
                                          L23 AND (RELAX? OR RELEAS? OR LANTH?)
L24
L27
             17 SEA FILE=HCAPLUS ABB=ON L21 AND HYDROXIDES/IT
             24 SEA FILE=HCAPLUS ABB=ON
                                          L18 OR L24 OR L27
L28
                                          L20 AND COMPLEX?
              4 SEA FILE=HCAPLUS ABB=ON
L29
                                                        CA references afrom the hapdropides (claim3) and utility. The complying agent (claim!, ising alumina formula I) is too broad to chel
             27 SEA FILE=HCAPLUS ABB=ON
                                          L28 OR L29
L30
=> d 130 1-27 all hitstr
     ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
ΑN
     2002:236839 HCAPLUS
DN
     136:252259
     Composition, packaged in an aerosol device, comprising alumina
TT
     Nocerino, Cecile; Giroud, Franck; Sturla, Jean-Michel
IN
PΑ
     L'Oreal, Fr.
SO
     Eur. Pat. Appl., 7 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     French
IC
     ICM A61K007-11
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
                                                               DATE
                             -----
     EP 1190701
                             20020327
                                             EP 2001-402397
                                                               20010919
ΡI
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     FR 2814067
                             20020322
                                             FR 2000-11991
                                                               20000920
                       A1
     JP 2002145735
                             20020522
                                             JP 2001-282664
                                                               20010918
                        Α2
     US 2002037256
                             20020328
                                             US 2001-955299
                                                               20010919
                        Α1
PRAI FR 2000-11991
                        Α
                             20000920
     A hair aerosol contains a liq. phase comprising aluminum
     hydroxide nanopartilces having av. size 2-200 nm, and a propellant. A
     hair aerosol contained aluminum oxide nanoparticle having an av.
     size 13 nm 0.3, water 2.7, ethanol 32, and di-Me ether 65%.
ST
     cosmetics hair aerosol alumina nanoparticle propellant
IT
     Alkanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C3-5; compn., packaged in aerosol device, comprising alumina
        nanoparticles)
ΙT
     Alcohols, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (C3-5; compn., packaged in aerosol device, comprising alumina
        nanoparticles)
     Lactams
TT
```

THE PROPERTY OF THE PROPERTY O

```
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (N-vinyl, polymers; compn., packaged in aerosol device,
        comprising alumina nanoparticles)
ΙT
     Cosmetics
        (aerosols; compn., packaged in aerosol device, comprising
        alumina nanoparticles)
     Fats and Glyceridic oils, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (animal; compn., packaged in aerosol device, comprising
        alumina nanoparticles)
IT
     Adhesives
     Antifoaming agents
     Antiperspirants
     Dyes
     Nanoparticles
     Perfumes
     Pigments, nonbiological
     Preservatives
     Propellants (sprays and foams)
     Reducing agents
     Solvents
     Sunscreens
     Surfactants
     Sweetening agents
     Thickening agents
        (compn., packaged in aerosol device, comprising alumina
        nanoparticles)
     Oxides (inorganic), biological studies
IT
     Paraffin oils
     Polymers, biological studies
     Polysiloxanes, biological studies
     Proteins
     Thiols (organic), biological studies
     Vitamins
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compn., packaged in aerosol device, comprising alumina
        nanoparticles)
IT
    Acids, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (compn., packaged in aerosol device, comprising alumina
        nanoparticles)
    Alkali metal hydroxides
ΙT
     RL: NUU (Other use, unclassified); USES (Uses)
        (compn., packaged in aerosol device, comprising alumina
        nanoparticles)
    Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polyhydric; compn., packaged in aerosol device, comprising
        alumina nanoparticles)
IT
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (vegetable; compn., packaged in aerosol device, comprising
        alumina nanoparticles)
IT
     67-64-1, Acetone, biological studies
                                            75-37-6, 1,1-Difluoroethane
     115-10-6, Dimethylether 1303-86-2, Boron oxide, biological studies
     1344-28-1, Alumina, biological studies 63957-70-0, Boehmite
```

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (compn., packaged in aerosol device, comprising alumina

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

nanoparticles)

RE.CNT

The second designation of the second second

The second secon

```
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 1983, V7(205), PC-185
(2) Anon; PATENT ABSTRACTS OF JAPAN 2001, V2000(11)
(3) Osaka Ship Building Co; JP 2000212051 A 2000 HCAPLUS
(4) Touyou Aerosol Kogyo Kk; JP 58103301 A 1983 HCAPLUS
    63957-70-0, Boehmite
ΙT
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compn., packaged in aerosol device, comprising alumina
        nanoparticles)
     63957-70-0 HCAPLUS
RN
    Boehmite (Al2O3.xH2O) (9CI)
CN
                                 (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L30 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2002 ACS
    2002:236838 HCAPLUS
AN
DN
    136:267894
ΤI
    Cosmetic composition comprising alumina nanoparticles and a
    fixing polymer
IN
    Nocerino, Cecile; Giroud, Franck; Sturlag, Jean-Michel
    L'Oreal, Fr.
PΑ
SO
    Eur. Pat. Appl., 14 pp.
    CODEN: EPXXDW
DT
    Patent
LA
    French
    ICM A61K007-11
IC
CC
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     _____
                     ----
                                         ______
                                         EP 2001-402396 20010919
    EP 1190700 A1 .20020327
PΙ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    FR 2814068
                                          FR 2000-11992
                    A1
                           20020322
                                                           20000920
PRAI FR 2000-11992
                      Α
                           20000920
    Cosmetic compn. comprising alumina nanoparticles having av. size
     .ltoreq.25 nm and a fixing polymer are disclosed. A hair prepn.
    contained aluminum oxide (av. particle size = 13 nm) 0.3,
    polyvinylpyrrolidone 2, ethanol 32.7, and di-Me ether 65%.
ST
    hair cosmetic alumina nanoparticle fixing polymer
ΙT
    Alcohols, uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (C1-4; cosmetic compn. comprising alumina nanoparticles and
        fixing polymer)
ΙT
    Cosmetics
        (aerosols; cosmetic compn. comprising alumina nanoparticles
        and fixing polymer)
ΙT
    Fats and Glyceridic oils, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (animal; cosmetic compn. comprising alumina nanoparticles and
        fixing polymer)
İT
    Adhesives
    Antifoaming agents
    Antiperspirants
```

Dyes

Nanoparticles Perfumes

Preservatives Reducing agents

Pigments, nonbiological

```
Solvents
     Sunscreens
     Surfactants
     Thickening agents
        (cosmetic compn. comprising alumina nanoparticles and fixing
     Oxides (inorganic), biological studies
ΤТ
     Paraffin oils
     Polymers, biological studies
     Polysiloxanes, biological studies
     Proteins
     Thiols (organic), biological studies
     Vitamins
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
        polymer)
TT
     Acids, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
        polymer)
TT
     Alkali metal hydroxides
     RL: NUU (Other use, unclassified); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
        polymer)
ΙT
     Cosmetics
        (gels; cosmetic compn. comprising alumina nanoparticles and
        fixing polymer)
TT
     Alcohols, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (polyhydric; cosmetic compn. comprising alumina nanoparticles
        and fixing polymer)
     Fats and Glyceridic oils, biological studies
TT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (vegetable; cosmetic compn. comprising alumina nanoparticles
        and fixing polymer)
IΤ
     1303-86-2, Boron oxide, biological studies 1344-28-1, Alumina,
                          9003-39-8, Polyvinylpyrrolidone
                                                            25086-89-9, Vinyl
     biological studies
     acetate-vinylpyrrolidone copolymer 25189-83-7, Polyvinylcaprolactam
     26124-25-4, Vinyl acetate-vinyl propionate-vinylpyrrolidone copolymer 63957-70-0, Boehmite
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
        polymer)
     64-17-5, Ethanol, uses
                              67-64-1, Acetone, uses
TT
     RL: NUU (Other use, unclassified); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
        polymer)
RE.CNT
        3
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 2001, V2000(11)
(2) Osaka Ship Building Co; JP 2000212051 A 2000 HCAPLUS
(3) Unilever; WO 0130310 A 2001 HCAPLUS
     63957-70-0, Boehmite
ΙT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic compn. comprising alumina nanoparticles and fixing
```

(CA INDEX NAME)

The state of the s

Boehmite (Al2O3.xH2O) (9CI)

polymer)

63957-70-0 HCAPLUS

RN

CN

```
ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2002 ACS
T.30
     2001:780648 HCAPLUS
AN
DN
     135:335147
     Polymer-based injectable sustained release pharmaceutical compositions for
ΤI
     peptide and protein drugs
IN
     Lee, Hee-yong; Lee, Hye-suk; Kim, Jung-soo; Kim, Sang-beom; Lee, Ji-suk;
     Choi, Ho-il; Chang, Seung-gu
     Peptron Inc., S. Korea.
PΑ
SO
     PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K009-22
CC
     63-6 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                              DATE
                             -----
                                            _____
                                          WO 2001-KR462 20010322
PΙ
     WO 2001078687
                      A1
                             20011025
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       A1 20020320
                                            EP 2001-917893
                                                            20010322
     EP 1187602
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                     Α
                             20000418
PRAI KR 2000-20484
                             20000824
     KR 2000-49344
                       Α
     WO 2001-KR462
                       W
                             20010322
AΒ
     Controlled and sustained release injectable pharmaceutical compns. for a
    biopharmaceutical, such as peptides and proteins are described. Processes
     for prepn. of an injectable sustained release compn. comprises (i) a step
     of prepg. biodegradable porous microspheres having accessible ionic
     functional groups, (ii) a step of encapsulating a biopharmaceutical into
     the microspheres through ionic interaction by suspending or equilibrating
     the microspheres in a soln. contg. the biopharmaceutical, and (iii) a step
     of recovering and freeze-drying the biopharmaceutical-incorporated
    microspheres. For example, microspheres were prepd. by water/oil/water.
     double emulsion solvent evapn. method using a hydrophilic 50:50 PLGA
    polymer (RG 502H), which contains free carboxy end groups. Deionized
     water (800 mL) was added to 1 g of PLGA polymer dissolved in 2 mL of
    methylene chloride and emulsified by sonication for 30 s using a probe
     type ultrasonic generator. This primary emulsion was dispersed into 200
    mL of deionized water contg. 0.5% polyvinyl alc. (wt./vol.) in a vessel
     which connected to a const. temp. controller and mixed well by stirring
     for 15 min at 2500 rpm, 25.degree. using a mixer. After mixing for
     another 15 min at 1500 rpm, 25.degree., temp. of continuous phase was
     increased to 40.degree. to evap. methylene chloride. After 1 h stirring
     at 40.degree., 1500 rpm, temp. was decreased to 25.degree.. The hardened
    microspheres were collected by centrifugation and washed twice with 200 mL
     of deionized water, and then freeze-dried. The microspheres obtained were
     used for incorporation of protein drugs, i.e., ovalbumin, bovine serum
```

albumin, human growth hormone, RNase A, or lysozyme through ionic

buffer soln. having an appropriate concn. of protein.

interaction by simply soaking and equilibrating the microspheres into a

THE PROPERTY OF THE PROPERTY O

entere de destate de de la companya
```
KOSS
     peptide protein polymer encapsulation controlled release microsphere;
ST
     sustained release microsphere peptide protein injection
     Proteins, specific or class
TΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (A; prepn. of polymer-based injectable sustained-release microspheres
        for peptide and protein drugs)
ΙT
     Proteins, specific or class
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C-reactive; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
     Proteins, specific or class
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C; prepn. of polymer-based injectable sustained-release microspheres
        for peptide and protein drugs)
ΙT
     Apolipoproteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (E; prepn. of polymer-based injectable sustained-release microspheres
        for peptide and protein drugs)
ΙT
     Acids, biological studies
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (acidifying agents; prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
ΙT
     Alkali metal hydroxides
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (alkalizing agents; prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
     Quaternary ammonium compounds, biological studies
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (alkylbenzyldimethyl, chlorides; prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
ΙT
     Functional groups
     Surfactants
        (anionic; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
     Antibodies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-infective; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
        (antigens; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
     Polymers, biological studies
     Polyurethanes, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biodegradable; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (caprolactone-based; prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
IT
     Growth factors, animal
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (cartilage-inducing factor; prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
```

(cationic; prepn. of polymer-based injectable sustained-release

Glycoproteins, specific or class

microspheres for peptide and protein drugs)

IT

IT

Surfactants

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cytotoxic; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dilactone-based; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Lymphokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (erythroid-potentiating factors; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT B cell (lymphocyte)

T cell (lymphocyte)

(factors regulating; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glycolide-based; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

A Commence of the state of the

IT Peptides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunotherapeutic; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Drug delivery systems

(immunotoxins; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Drug delivery systems

(injections, controlled release; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Drug delivery systems

(injections, sustained release; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lactide; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Annexins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lipomodulin; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Casting process

(low temp.; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Cytokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (macrophage-activating factor; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Encapsulation

(microencapsulation; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Drug delivery systems

(microspheres, controlled-release; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Polyethers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ortho ester group-contg.; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

IT Growth factors, animal

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (osteogenic growth factors; prepn. of polymer-based injectable

```
sustained-release microspheres for peptide and protein drugs)
ΙT
    Macrophage
        (peptides; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
IT
     Functional groups
        (phosphoryl group; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
     Polyamides, biological studies
TΥ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (poly(amino acids); prepn. of polymer-based injectable
        sustained-release microspheres for peptide and protein drugs)
     Polyesters, biological studies
ΙŤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyamide-; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΤT
     Polyamides, biological studies
     Polyethers, biological studies
     Polyoxyalkylenes, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyester-; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
     Polyesters, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyether-; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyoxyalkylene-; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
ΙT
    Anti-infective agents
    Antibacterial agents
    Antiviral agents
    Carboxyl group
    Cryoprotectants
     Evaporation
     Fibrinolytics
     Freeze drying
     Particle size
     Phase separation
     Pulmonary surfactant
     Solvent extraction
        (prepn. of polymer-based injectable sustained-release microspheres for
        peptide and protein drugs)
ΙT
    Albumins, biological studies
     Gelatins, biological studies
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (prepn. of polymer-based injectable sustained-release microspheres for
        peptide and protein drugs)
IT
    Annexins
    Bone morphogenetic proteins
    Caseins, biological studies
    Collagens, biological studies
    Fibrinogens
    Hemoglobins
     Interferons
     Interleukin 1
     Interleukins
    Lymphotoxin
```

```
KOSS
```

ΙT

IT

IT

IT

ΙT

ΙT

ΙT

09/931914 Page 10 Ovalbumin Platelet-derived growth factors Polyanhydrides Polycarbonates, biological studies Polymer blends Polysaccharides, biological studies Proteins, general, biological studies Transferrins Transforming growth factors Tumor necrosis factors Zeins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) Drying (spray; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) Functional groups (sulfonyl group; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) Extraction (supercrit.; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) Antigens RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vaccine; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) 9001-99-4 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (A; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) 50-21-5, Lactic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 77-92-9, Citric acid, biological studies Tartaric acid, biological studies 110-17-8, Fumaric acid, biological 6915-15-7, Malic acid RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (acidifying agent; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) 102-71-6, Triethanolamine, biological studies 111-42-2, Diethanolamine, biological studies 141-43-5, Monoethanolamine, biological studies 144-55-8, Sodium bicarbonate, biological studies 471-34-1, Calcium 471-34-1, Calcium carbonate, biological studies 546-93-0, Magnesium carbonate 1309-48-4, Magnesium oxide, biological studies Sodium citrate 6284-40-8, Meglumine 7778-49-6, Potassium citrate 14987-04-3, Magnesium trisilicate RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkalizing agent; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs) 9002-64-6, Parathyroid hormone RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (and inhibitors; prepn. of polymer-based injectable sustained-release

The second secon

The second secon

The state of the s

microspheres for peptide and protein drugs) ΙT 1066-33-7, Ammonium bicarbonate RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (gas forming agent; prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)

The state of the s

```
KOSS
                                      Page 11
IT
     9001-12-1, Collagenase
                               9015-94-5, Renin, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitors; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
IT
     105913-11-9, Plasminogen activator
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (kidney; prepn. of polymer-based injectable sustained-release
        microspheres for peptide and protein drugs)
IT
     64-19-7, Acetic acid, biological studies
                                                 111-86-4, Octylamine
     124-07-2, Caprylic acid, biological studies 1309-42-8, Magnesium
                  7647-14-5, Sodium chloride, biological studies
                                                                     10043-52-4,
     Calcium chloride, biological studies
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (prepn. of polymer-based injectable sustained-release microspheres for
        peptide and protein drugs)
ΙT
     121-54-0, Benzethonium chloride 151-21-3, Sodium lauryl sulfate,
     biological studies 577-11-7, Docusate sodium 1393-25-5, Secretin
     1398-61-4, Chitin 1402-38-6, Oncostatin 8044-71-1, Cetrimide
     9001-25-6, Blood-coagulation factor VII 9001-28-9, Factor IX
     9001-63-2, Lysozyme 9002-01-1, Streptokinase
                                                        9002-60-2,
                                                          9002-61-3, Human
     Adrenocorticotrophic hormone, biological studies
     chorionic gonadotropin
                              9002-67-9, Luteinizing hormone
                                                                  9002-68-0,
     Follicle stimulating hormone
                                    9002-69-1, Relaxin
                                                           9002-71-5,
     Thyroid stimulating hormone 9002-72-6, Growth hormone
                                                                 9002-89-5,
                        9004-10-8, Insulin, biological studies 9004-53-9,
     Polyvinyl alcohol
                9004-54-0, Dextran, biological studies
                                                          9004-61-9, Hyaluronic
     Dextrin
            9005-25-8, Starch, biological studies 9005-32-7, Alginic acid
     acid
     9005-49-6, Heparin, biological studies
                                               9007-12-9, Calcitonin
     9007-27-6, Chondroitin
                              9007-92-5, Glucagon, biological studies
     9011-97-6, Cholecystokinin
                                  9012-76-4, Chitosan
                                                          9015-71-8,
                                       9034-39-3, Growth hormone releasing 9039-53-6, Urokinase 9041-92-3,
     Corticotropin releasing factor
               9035-68-1, Proinsulin
                             9054-89-1, Superoxide dismutase
                                                                 9056-36-4,
     .alpha.1-Antitrypsin
     Keratan sulfate
                       9061-61-4, Nerve growth factor 11096-26-7,
     Erythropoietin
                       15802-18-3D, Cyanoacrylic acid, esters, polymers
     24980-41-4, Polycaprolactone 25104-18-1, Poly(L-lysine)
Polycaprolactone 25868-59-1 25931-47-9 26009-03-0, F
                                                                   25248-42-4,
                                                    26009-03-0, Polyglycolide
     26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26202-08-4, Polyglycolide 26680-10-4, Polyglactide 26780-50-7, Poly(lactide-co-
                                                34346-01-5, Resomer RG 502H
     glycolide)
                  31621-87-1, Polydioxanone
     37221-79-7, Vasoactive intestinal polypeptide
                                                       38000-06-5, Poly(L-lysine)
                            57285-09-3, Inhibin 59392-49-3, Gastric inhibitory
     52906-92-0, Motilin
              59763-91-6, Pancreatic polypeptide
                                                      61912-98-9, Insulin-like
     peptide
     growth factor
                      62229-50-9, Epidermal growth factor
                                                             62683-29-8, Colony
                           67763-96-6, Somatomedin C 77272-10-7, Macrocortin
     stimulating factor
     80043-53-4, Gastrin releasing peptide 82657-92-9, Prourokinase
     83652-28-2, Calcitonin gene-related peptide 85637-73-6, Atrial
                           113189-02-9, Antihemophilic factor
     natriuretic factor
                                                                 139639-23-9,
     Tissue plasminogen activator
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (prepn. of polymer-based injectable sustained-release microspheres for
        peptide and protein drugs)
```

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT

- (1) Bodmer; In J Controlled Release 1992, V211-3, P129
- (2) Syntex Inc; US 5470582 1995 HCAPLUS
- 1309-42-8, Magnesium hydroxide IT RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

```
(prepn. of polymer-based injectable sustained-release microspheres for peptide and protein drugs)
```

The state of the s

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO-Mg-OH

```
ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
                                              opphiants
     2001:661220 HCAPLUS
ΑN
DN
     135:215751
TΙ
     Hair relaxer compositions containing
     complexing agent activators
IN
     Van Nguyen, Nghi; Cannell, David W.
     L'oreal, Fr.
PΑ
     PCT Int. Appl., 32 pp.
SO
     CODEN: PIXXD2
     Patent
DT
LA
     English
     ICM A61K007-06
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
     -----
                      ----
                                            -----
                                                             _____
    WO 2001064171
                     A2
                            20010907
                                           WO 2001-US6338
PΙ
                                                             20010228
     WO 2001064171
                      A3
                            20020110
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 2000-516942
                      Α
                            20000301
     The present invention provides a compn. for
     lanthionizing keratin fibers comprising at
     least 1 multivalent metal hydroxide and at least 1 complexing
     agent effective for dissocg. one multivalent metal hydroxide in sufficient
     quantity to effect lanthionization of the keratin
     fibers. In one embodiment, the complex that is formed
    between the complexing agent and a metal ion from the
    multivalent metal hydroxide is sol. in water.thus, a gel was prepd. from
    mineral oil 15.0, petrolatum 5.5, Sr(OH)2 octahydrate 18.6, propylene
     glycol 3.0, acrylates/Ceteth-20 itaconate copolymer 7.0, and water 50.9%.
     The relaxer gel (6 g) was mixed with a soln. of 1.83 g
     tetrasodium EDTA in 2 g water and the mixt. was applied to kinky
    hair. The relaxing efficiency of the strontium/EDTA
    hair relaxer was found to be in excess of 85%.
ST
    hair relaxer complexing agent; hydroxide
     EDTA hair relaxer
IT
     Ion exchangers
        (hair relaxer compns. contg.
        complexing agent activators)
IT
     Amino acids, biological studies
     Crown ethers
       Hydroxides (inorganic)
```

```
Silicates, biological studies
     Sulfonic acids, biological studies
     Zeolite-group minerals
     Zeolites (synthetic), biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair relaxer compns. contg.
        complexing agent activators)
IT
     Carboxylic acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hydroxy; hair relaxer compns. contg.
        complexing agent activators)
ΙT
    Hair preparations
        (straighteners; hair relaxer compns.
        contg. complexing agent activators)
     60-00-4, EDTA, biological studies
                                         67-43-6, Diethylenetriaminepentaacetic
TΤ
            77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid,
                         93-62-9, N-(2-Hydroxyethyliminodiacetic acid
    biological studies
     139-13-9 139-89-9, Trisodium N-(hydroxyethyl)ethylenediaminetriacetate
     140-01-2, Pentasodium diethylenetriaminepentaacetate
                                                            150-39-0,
    N-(Hydroxyethyl)ethylenediaminetriacetic acid 1305-62-0, Calcium
    hydroxide (Ca(OH)2), biological studies 1309-42-8, Magnesium
    hydroxide
                 1318-10-1, Analcime 1318-50-9, Epistilbite
                                                                1318 - 63 - 4,
                 1318-80-5, Laumontite 1318-83-8, Levynite
     Heulandite
                                                                1318-95-2,
    Natrolite
                 1319-20-6, Scolecite 1327-36-2, Aluminosilicate
                                                                      1763-07-1,
                           2235-43-0
                                       5064-31-3, Trisodium Nitrilotriacetate
    Guanidine phosphate
     6419-19-8, Aminotrimethylenephosphonic acid 6834-92-0, Sodium
                    7408-20-0, Iminodisuccinic acid 7601-54-9, Trisodium
    metasilicate
               7778-53-2, Tripotassium phosphate 10006-28-7, Silicic acid
    phosphate
     (H2SiO3), dipotassium salt
                                  12043-66-2, Mesolite 12173-28-3, Faujasite
     12173-98-7, Mordenite 12174-18-4, Phillipsite 12197-41-0, Brewsterite
     12251-23-9, Gismondine
                             12251-32-0, Chabazite
                                                     12251-35-3, Gmelinite
     12251-39-7, Harmotome 12252-36-7, Edingtonite 12399-54-1, Thomsonite
     12446-28-5, Stilbite 17194-00-2, Barium hydroxide (Ba(OH)2)
    18480-07-4, Strontium hydroxide (Sr(OH)2) 18933-05-6,
    Manganese hydroxide (Mn(OH)2) 20427-58-1, Zinc hydroxide
    (Zn(OH)2) 20427-59-2, Copper hydroxide (Cu(OH)2) 21041-93-0, Cobalt hydroxide (Co(OH)2) 21645-51-2,
    Aluminum hydroxide (Al(OH)3), biological studies
                                                        120070-48-6
    126853-99-4, Molybdenum hydroxide
                                        148124-41-8
                                                       148124-42-9
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair relaxer compns. contg.
        complexing agent activators)
ΙT
     64-02-8, Tetrasodium EDTA 1311-10-0, Strontium hydroxide
     octahydrate
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent); USES (Uses)
        (hair relaxer compns. contg.
        complexing agent activators)
    1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies
ΙT
    1309-42-8, Magnesium hydroxide 17194-00-2, Barium
    hydroxide (Ba(OH)2) 18480-07-4, Strontium hydroxide (Sr(OH)2)
    18933-05-6, Manganese hydroxide (Mn(OH)2) 20427-58-1,
     Zinc hydroxide (Zn(OH)2) 20427-59-2, Copper hydroxide (Cu(OH)2)
     21041-93-0, Cobalt hydroxide (Co(OH)2) 21645-51-2,
    Aluminum hydroxide (Al(OH)3), biological studies 126853-99-4,
    Molybdenum hydroxide
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

(Uses)

(hair relaxer compns. contg. complexing agent activators)

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

но-Са-ОН

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO-Mg-OH

RN 17194-00-2 HCAPLUS

CN Barium hydroxide (Ba(OH)2) (9CI) (CA INDEX NAME)

но-ва-он

RN 18480-07-4 HCAPLUS

CN Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)

HO-Sr-OH

RN 18933-05-6 HCAPLUS

CN Manganese hydroxide (Mn(OH)2) (8CI, 9CI) (CA INDEX NAME)

HO-Mn-OH

RN 20427-58-1 HCAPLUS

CN Zinc hydroxide (Zn(OH)2) (9CI) (CA INDEX NAME)

HO-Zn-OH

RN 20427-59-2 HCAPLUS

CN Copper hydroxide (Cu(OH)2) (8CI, 9CI) (CA INDEX NAME)

HO-Cu-OH

RN 21041-93-0 HCAPLUS

CN Cobalt hydroxide (Co(OH)2) (6CI, 8CI, 9CI) (CA INDEX NAME)

HO-Co-OH

RN 21645-51-2 HCAPLUS

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

Aluminum hydroxide (Al(OH)3) (9CI) (CA INDEX NAME) CN

OH HO-Al-OH

126853-99-4 HCAPLUS RN

Molybdenum hydroxide (9CI) (CA INDEX NAME) CN

Component		Ratio	[[Component Registry Number
=========	==+==		===+=	
HO	1	x	1	14280-30-9
Мо		×	1	7439-98-7

ΙT 1311-10-0, Strontium hydroxide octahydrate

> RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(hair relaxer compns. contg.

complexing agent activators)

RN 1311-10-0 HCAPLUS

Strontium hydroxide (Sr(OH)2), octahydrate (9CI) (CA INDEX NAME) CN

HO-Sr-OH

●8 H20

L30 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2002 ACS

ΑN 2001:136991 HCAPLUS

DN 134:198075

ΤI Triglyceride-free compositions and methods for enhanced absorption of hydrophilic therapeutic agents

IN Patel, Mahesh V.; Chen, Feng-Jing

Lipocine, Inc., USA PA

PCT Int. Appl., 113 pp. SO

CODEN: PIXXD2

DTPatent

LA English

IC ICM A61K009-00

> A61K009-14; A61K009-16; A61K009-20; A61K009-22; A61K009-28; A61K009-48

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 4

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2001012155 A1 20010222 WO 2000-US18807 20000710 PΤ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,-
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6309663
                        B1
                             20011030
                                            US 1999-375636
                                                              19990817
     EP 1210063
                        Α1
                             20020605
                                            EP 2000-947184
                                                              20000710
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     US 2001024658
                       Α1
                             20010927
                                            US 2000-751968
                                                              20001229
PRAI US 1999-375636
                       Α
                             19990817
     WO 2000-US18807
                       W
                             20000710
AB
     The present invention relates to triglyceride-free pharmaceutical compns.,
     pharmaceutical systems, and methods for enhanced absorption of hydrophilic
     therapeutic agents. The compns. and systems include an absorption
     enhancing carrier, where the carrier is formed from a combination of at
     least two surfactants, at least one of which is hydrophilic. A
     hydrophilic therapeutic agent can be incorporated into the compn., or can
     be co-administered with the compn. as part of a pharmaceutical system.
     The invention also provides methods of treatment with hydrophilic
     therapeutic agents using these compns. and systems. For example, when a compn. contg. Cremophor RH40 0.30, Arlacel 186 0.20, Na taurocholate 0.18,
     and propylene glycol 0.32 g, resp., was used, the relative absorption of
     PEG 4000 as a model macromol. drug was enhanced by 991%.
ST
     hydrophilic drug surfactant absorption enhancement
ΙT
     Lysophospholipids
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C18; compns. for enhanced absorption of hydrophilic drugs using
        combination of surfactants)
ΙT
     Diglycerides
     Glycerides, biological studies
     Monoglycerides
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C8-10 monoglycerides and diglycerides; compns. for enhanced absorption
        of hydrophilic drugs using combination of surfactants)
IT
     Glycerides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C8-10, ethoxylated; compns. for enhanced absorption of hydrophilic
        drugs using combination of surfactants)
ΙT
     Glycerides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (C8-18 and C18-unsatd. mono- and di-, ethoxylated; compns. for enhanced
        absorption of hydrophilic drugs using combination of surfactants)
ΙT
     Antibodies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Fc fragment, fusion protein with TNF receptor; compns. for enhanced
        absorption of hydrophilic drugs using combination of surfactants)
ΙT
     Lung
     Mucous membrane
        (administration by; compns. for enhanced absorption of hydrophilic
        drugs using combination of surfactants)
ΙT
     Drug delivery systems
        (aerosols; compns. for enhanced absorption of hydrophilic drugs using
        combination of surfactants)
ΙT
     Phenols, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (alkyl, ethoxylated; compns. for enhanced absorption of hydrophilic
```

The state of the s

drugs using combination of surfactants)

Antiarthritics TΤ

4 KOSS

(anti-gout agents; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

ΙT Drug delivery systems

> (beads; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

ΙT Natural products, pharmaceutical

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (belladonna; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

The second secon

Drug delivery systems IT

> (buccal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

TΤ Drug delivery systems

(capsules; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

ΙT Gelatins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (capsules; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

Gonadotropins IT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chrionic; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

ΙT Analgesics

Anthelmintics

Anti-inflammatory agents

Antianginal agents

Antiarrhythmics

Antiasthmatics

Antibacterial agents

Anticoaqulants

Anticonvulsants

Antidepressants

Antidiabetic agents

Antifoaming agents

Antihistamines

Antihypertensives

Antimalarials

Antimigraine agents

Antiparkinsonian agents

Antipsychotics

Antitumor agents

Antitussives

Antiviral agents

Anxiolytics

Blood serum

Buffers

Chelating agents .

Compression

Diuretics

Drug delivery systems

Encapsulation

Extrusion, nonbiological

Flavoring materials

Fungicides

Hypnotics and Sedatives

Immunosuppressants

Inotropics

Molding

```
Muscarinic antagonists
     Muscle relaxants
     Nervous system stimulants
     Nutrients
     Peptidomimetics
     Plasticizers
     Preservatives
     Protozoacides
     Solubilizers
     Spheronization
     Surfactants
     Vaccines
        (compns. for enhanced absorption of hydrophilic drugs using combination
        of surfactants)
IT
     Acrylic polymers, biological studies
     Alcohols, biological studies
     Amides, biological studies
     Amino acids, biological studies
     Carbohydrates, biological studies
     Corticosteroids, biological studies
     Cytokines
     Diglycerides
     Elastins
     Enkephalins
     Esters, biological studies
     Fatty acids, biological studies
     Genetic element
     Glycerides, biological studies
     Glycosides
     Interleukin 2
     Interleukin 3
     Lecithins
     Lysophosphatidic acids
     Lysophosphatidylcholines
     Lysophosphatidylethanolamines
     Lysophosphatidylserines
     Macromolecular compounds
     Nucleic acids
     Nucleosides, biological studies
     Nucleotides, biological studies
     Oligonucleotides
     Peptides, biological studies
     Phosphatidic acids
     Phosphatidylcholines, biological studies
     Phosphatidylethanolamines, biological studies
     Phosphatidylglycerols
     Phosphatidylserines
     Phospholipids, biological studies
     Platelet-derived growth factors
     Polyoxyalkylenes, biological studies
     Proteins, general, biological studies
     Sex hormones
     Shellac
     Sterols
     Sulfonic acids, biological studies
     Tannins
     Toxoids
     Tumor necrosis factors
```

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for enhanced absorption of hydrophilic drugs using combination

of surfactants)

IT Drug delivery systems

KOSS

(controlled-release; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (corn, ethoxylated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Bath preparations

(douches; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(drops; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(elixirs; compns. for enhanced absorption of hydrophilic drugs using_____combination of surfactants)

IT Drug delivery systems

(emulsions; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Castor oil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ethoxylated, Emalex C40; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Corn oil

Ethers, biological studies

Palm kernel oil

Sterols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ethoxylated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Tumor necrosis factor receptors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (fusion protein with antibody Fc fragment; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drugs

(gastrointestinal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

The second secon

IT Drug delivery systems

(gels; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(granules; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Vaccines

(hepatitis A; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Vaccines

(hepatitis B; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Castor oil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Vaccines

(influenza; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Enzymes, biological studies

Thyroid hormones

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(inhibitors; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Skin preparations (pharmaceutical)

(keratolytics; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipid regulating agents; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(lotions; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Lysophosphatides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lysophosphatidylglycerols; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Vaccines

(measles; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Polymers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (mucoadhesive; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Vaccines

(mumps; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(nasal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Surfactants

(nonionic; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(ointments, creams; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(ointments; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(oral; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(particles; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(pastes; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(pellets; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Antioxidants

(pharmaceutical; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Infection

(plague, vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Alcohols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polyhydric; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

Phosphatidylethanolamines, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(reaction products, with PEG and PVP; compns. for enhanced absorption of hydrophilic drugs using combination of symfactants)

of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(rectal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Fatty acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (salts, carnitine; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(solns.; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

The second second control of the second seco

IT Sterols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (soya, ethoxylated; compns. for enhanced absorption of hydrophilic drugs using combination of—surfactants)

IT Drug delivery systems

(sprays; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Monoglycerides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (succinylated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(suppositories, vaginal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(suppositories; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(suspensions; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(sustained-release; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(syrups; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Glycosides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thioglycosides, alkyl esters; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Haemophilus influenzae

(type b, conjugated vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Human poliovirus

(vaccine; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Japanese encephalitis virus

Mycobacterium BCG

Neisseria meningitidis

Rabies

Rotavirus

Streptococcus pneumoniae

Typhoid fever

(vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Drug delivery systems

(vaginal; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Human herpesvirus 3

(varicella from, vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Infection

(variola, vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vegetable, ethoxylated, hydrogenated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vegetable, hydrogenated; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vegetable; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Fever and Hyperthermia

(yellow, vaccines; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (.alpha.; compns. for enhanced absorption of hydrophilic drugs using
 combination of surfactants)

IT Adrenoceptor antagonists

(.beta.-; compns. for enhanced absorption of hydrophilic drugs using
combination of surfactants)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (.beta.; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT 9011-29-4, Nikkol GS 6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Nikkol GS 460; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT 9005-25-8, Starch, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (capsules; compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT 59277-89-3, Acyclovir

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

IT 63585-09-1, Foscarnet sodium

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

ΙT 50-21-5, Lactic acid, biological studies 50-21-5D, Lactic acid, acyl 50-56-6, Oxytocin, biological studies 50-70-4, Sorbitol, 50-81-7, Ascorbic acid, biological studies biological studies Pralidoxime chloride 51-43-4, Epinephrine 51-55-8, Atropine, biological studies 51-60-5, Neostigmine methyl sulfate 52-24-4, 53-79-2, Puromycin 56-81-5, Glycerol, biological studies 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies

57-55-6, Propylene glycol, biological studies Vincristine 57-55-6D, Propylene glycol, ethers 57-64-7, Physostigmine salicylate 57-88-5, Cholesterol, biological studies 57-94-3, Tubocurarine chloride 59-05-2, Methotrexate 60-00-4, EDTA, biological studies 60-00 60-00-4D, EDTA, conjugates with antipain and chitosan 60-31-1, Acetylcholine chloride 60-33-3, Linoleic acid, biological studies 62-31-7, Dopamine hydrochloride 63-91-2, Phenylalanine, biological studies 64-18-6, Formic acid, biological studies 64-19-7, Acetic acid, biological studies 65-28-1, Phentolamine mesylate 65-85-0, Benzoic acid, biological studies 66-71-7, 1,10-Phenanthroline 67-42-5, EGTA 68-11-1, Thioglycolic acid, biological studies 68-19-9, Vitamin B12 69-65-8, Mannitol 69-72-7, Salicylic acid, biological studies 69-79-4D, Maltose, alkyl esters 69-93-2, Uric acid, biological studies 70-51-9, Deferoxamine 71-27-2, Suxamethonium chloride 74-89-5, Methanamine, biological studies 75-75-2, Methanesulfonic acid 77-19-0, Dicyclomine 77-92-9, Citric acid, biological studies 77-92-9D, Citric acid, glycerides 79-09-4, Propionic acid, biological studies 79-10-7, Acrylic acid, biological 79-10-7D, Acrylic acid, polymers 81-24-3, Taurocholic acid studies 81-25-4, Cholic acid 83-44-3, Deoxycholic acid 87-69-4, Tartaric acid, biological studies 87-69-4D, Tartaric acid, glycerides, biological 89-57-6, Mesalamine 89-65-6, Isoascorbic acid studies 101-26-8, Pyridostigmine bromide 102-71-6, Triethanolamine, biological studies 104-15-4, p-Toluenesulfonic acid, biological studies 107-15-3, Ethylenediamine, biological studies 107-21-1, Ethylene glycol, biological studies 107-92-6, Butyric acid, biological studies 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 110-27-0, Isopropyl myristate 111-62-6, Ethyl oleate 112-80-1, Oleic 114-07-8, Erythromycin 114-80-7, Neostigmine acid, biological studies 115-77-5, Pentaerythritol, biological studies 121-44-8, Triethylamine, biological studies 122-20-3, Triisopropanolamine 124-04-9, Adipic acid, biological studies 124-07-2, Caprylic acid, 128-13-2, Ursodeoxycholic acid 129-06-6, Warfarin biological studies 131-49-7, Diatrizoate meglumine 138-36-3, psodium Bromobenzenesulfonic acid 140-64-7, Pentamidine isethionate 141-22-0 Ricinoleic acid 141-43-5, Ethanolamine, biological studies 142-62-1, 141-22-0, Caproic acid, biological studies 142-91-6, Isopropyl palmitate 143-07-7, Lauric acid, biological studies 143-07-7D, Lauric acid, glycerides 144-55-8, Sodium hydrogen carbonate, biological 144-62-7, Oxalic acid, biological studies 145-42-6, Sodium Macrogol glycerides studies taurocholate 147-94-4, Cytarabine 148-24-3, 8-Quinolinol, biological 151-21-3, Sodium lauryl sulfate, biological studies studies 154-21-2, Lincomycin 155-97-5, Pyridostigmine Lauryl sulfate eric acid 360-65-6, Glycodeoxycholic 463-40-1, Linolenic acid 463-79-6, 299-42-3, Ephedrine 334-48-5, Capric acid 434-13-9, Lithocholic acid 463-79-6, ... Carbonic acid, biological studies 471-34-1, Calcium carbonate, biological studies 474-25-9, Chenodeoxycholic acid 475-31-0, Glycocholic acid 516-35-8, Taurochenodeoxycholic acid 516-50-7, Taurodeoxycholic acid 526-95-4, Gluconic acid 541-15-1D, Carnitine, fatty acid ester salts 544-35-4, Ethyl linoleate 544-63-8, Myristic acid, biological studies 577-11-7, Sodium docusate 616-91-1, N-Acetylcysteine 640-79-9, Glycochenodeoxycholic acid 665-66-7, Amantadine hydrochloride 737-31-5, Diatrizoate sodium 863-57-0, Sodium glycocholate 865-21-4, Vinblastin 1002-62-6, Sodium caprate 1115-70-4, Metformin hydrochloride 1264-72-8, Colistin sulfate glycocholate 865-21-4, Vinblastin 1309-42-8, Magnesium hydroxide 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 1319-82-0, Aminocaproic acid 1327-43-1, Magnesium aluminum silicate 1330-80-9, Propylene glycol monooleate 1335-30-4, Aluminum silicate 1336-21-6, Ammonium hydroxide 1338-39-2, Span 20 1338-41-6, Sorbitan

The state of the s

ΙT

erier bereite amilie telen bill aufthill inneren er erien in henre betreiten er

monostearate 1338-43-8, Span 80 1397-89-3, Amphotericin B 1403-66-3, Gentamycin 1404-90-6, Vancomycin 1405-20-5, Polymixin B sulfate 1405-37-4, Capreomycin sulfate 1405-87-4, Bacitracin 1492-18-8, Leucovorin calcium 1501-84-4, Rimantadine hydrochloride 1684-40-8, Tacrine hydrochloride 1695-77-8, Spectinomycin 1935-18-8, Palmitoyl carnitine 2016-88-8, Amiloride hydrochloride 2364-67-2, Palmitoyl 2466-77-5, Lauroyl carnitine 2646-38-0, Sodium carnitine 2898-95-5, Sodium ursodeoxycholate chenodeoxycholate 3056-17-5, Stavudine 3485-62-9, Clidinium bromide 3778-73-2, Isofosfamide 3858-83-1, P-Aminobenzamidine 4291-63-8, Cladribine 5534-95-2, 6303-21-5D, Phosphinic acid, dipeptide derivs. Pentagastrin 6493-05-6, 7087-68-5, Diisopropylethylamine 7481-89-2, Zalcitabine Pentoxifylline 7585-39-9D, .beta.-Cyclodextrin, ethers with propanediol 7647-01-0, Hydrochloric acid, biological studies 7648-98-8, Ambenonium 7664-38-2, Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological 7664-93-9D, Sulfuric acid, alkyl esters, salts, biological studies 7697-37-2, Nitric acid, biological studies 8007-43-0, Sorbitan studies sesquioleate 8068-28-8, Colistimethate sodium 9001-28-9, Factor IX 9002-01-1, Streptokinase 9002-60-2, Corticotropin, biological studies 9002-92-0, Brij 35 9002-96-4 9003-01-4D, Polyacrylic acid, conjugates 9003-39-8D, Polyvinylpyrrolidone, reaction products with ' with bacitracin phosphatidylethanolamine 9004-10-8, Insulin, biological studies 9004-32-4D, Carboxymethyl cellulose, 9004-17-5, Insulin protamine zinc conjugates with pepstatin 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, ethers, biological studies 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-81-3 9004-95-9, Polyethylene glycol cetyl ether 9004-96-0, Crodet 040 9004-98-2, Polyoxyethylene oleyl ether 9004-99-3 9005-00-9, Polyoxyethylene 9005-02-1, Kessco PEG 300DL 9005-07-6, Kessco PEG 1540DO stearyl ether 9005-32-7, Alginic acid 9005-63-4D, fatty acid esters 9005-08-7 9005-64-5, Tween 20 9005-65-6, Polysorbate 80 9005-66-7, Tween 40 9005-67-8, Tween 60 9007-48-1, Plurol Oleique 9007-92-5, Glucagon, biological studies 9011-21-6. 9012-76-4, Chitosan 9012-76-4D., ___ Chitosan, conjugates with antipain and EDTA 9015-68-3, Asparaginase 9034-40-6, Gonadotropin releasing hormone 9035-81-8, Trypsin inhibitor 9036-19-5 9039-53-6, Urokinase 9041-08-1, Enoxaparin sodium 9041-93-4, Bleomycin sulfate 9050-31-1, Hydroxypropylmethyl cellulose 9062-90-2 9063-46-1 9076-44-2, Chymostatin 9078-38-0, phthalate Soybean trypsin inhibitor 9087-70-1, Pancreatic trypsin inhibitor 10034-85-2, Hydriodic acid 10035-10-6, Hydrobromic acid, biological 10041-19-7D, derivs. 10043-35-3, Boric acid, biological studies 10596-23-3 11000-17-2, Vasopressin 11061-68-0, Human insulin studies 11140-04-8, Imwitor 988 12584-58-6, Porcine insulin 12629-01-5, Human growth hormone 13265-10-6, Methscopolamine 13284-86-1, Sodium lithocholate 13780-71-7D, Boronic acid, .alpha.-aminoalkyl derivs. 14440-80-3, Stearoyl-2-lactylate 14605-22-2, Tauroursodeoxycholic acid 15500-66-0, Pancuronium bromide 15663-27-1, Cisplatin 15686-71-2, Cephalexin 15826-37-6, Cromolyn sodium 16679-58-6, Desmopressin 16960-16-0, Cosyntropin 17438-29-8 18323-44-9, Clindamycin 18883-66-4, Streptozocin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. for enhanced absorption of hydrophilic drugs using combination of surfactants) 20537-88-6, Amifostine 21215-62-3, Calcitonin human 21645-51-2 Aluminum hydroxide, biological studies 21679-14-1, Fludarabine Aluminum hydroxide, biological studies 210/3-14-1, Fiddalasim 22254-24-6, Ipratropium bromide 22882-95-7, Isopropyl linoleate 23031-32-5, Terbutaline sulfate 23214-92-8, Doxorubicin 24356-32-3, Sincelide 24356-60-3, Cephapirin sodium 24938-16-7, Eudragit E 25126-32-3, Sincalide

25322-68-3, Polyethylene glycol

25168-73-4, Sucrose monostearate 25212-88-8, Eudragit L100=55

25339-99-5, Sucrose monolaurate

25496-72-4, Monoolein 25597-07-3, Myristoylcarnitine 25637-84-7, Glyceryl dioleate 25637-97-2, Sucrose dipalmitate 26264-14-2D, Propanediol, ethers with .beta.-cyclodextrin 26266-57-9, Sorbitan monopalmitate 26266-58-0, Sorbitan trioleate 26402-22-2, Glyceryl monocaprate 26402-26-6, Glyceryl monocaprylate 26446-38-8, Sucrose monopalmitate 26589-39-9, Eudragit S 26658-19-5, Sorbitan tristearate 26839-75-8, Timolol 27164-46-1, Cefazolin sodium 27195-16-0, Sucrose distearate 27214-38-6, Nikkol MGM 27215-38-9, Imwitor 312 27321-96-6, Solulan C-24 27638-00-2, Glyceryl dilaurate 29122-68-7, Atenolol 30516-87-1, Zidovudine 31694-55-0D, C8-10-esters 33434-24-1, Eudragit RL 33515-09-2, Gonadorelin 33564-30-6, Cefoxitin 34787-01-4, Ticarcillin 36354-80-0, Glyceryl dicaprylate 4-5, Ribavirin 37220-82-9, Peceol 37321-62-3, Lauroglycol 36791-04-5, Ribavirin 37330-34-0, Bowman-Birk inhibitor 37330-34-0D, Bowman-Birk inhibitor, conjugates with polyacrylic acid 37691-11-5, Antipain 37691-11-5D, Antipain, conjugates with chitosan and EDTA 38916-34-6, Somatostatin 39324-30-6, Pepstatin 39324-30-6D, Pepstatin, conjugates with CM-cellulose 39366-43-3, Magnesium aluminum hydroxide 39438-11-4, Sorbitan monocaprate 41575-94-4, Carboplatin 42057-22-7, Mezlocillin 42540-40-9, Cefamandole nafate 42766-91-6, Nikkol DHC 42907-92-6, Sodium tauro-24,25-dihydrofusidate 47931-85-1, Calcitonin____ 50700-72-6, Vecuronium bromide 51192-09-7, Tagat 02 51384-51-1, Metoprolol 51822-44-7, Eudragit L 51938-44-4, Sorbitan sesquistearate 52504-24-2, Softigen 767 52581-71-2, Volpo 3 52907-01-4, Cellulose acetate trimellitate 53168-42-6, Myvacet 9-45 53237-50-6 53910-25-1, Pentostatin 53988-07-1, Glyceryl dicaprate 54063-53-5, Propafenone 54392-26-6, Sorbitan monoisostearate 56180-94-0, Acarbose 54910-89-3, Fluoxetine 55123-66-5, Leupeptin 57107-95-6 57171-56-9 57248-88-1, Pamidronate disodium 58561-47-0, Softigen 701 58970-76-6, Bestatin 59227-89-3, 1-Dodecylazacycloheptan-59703-84-3, Piperacillin sodium 59721-29-8, Camostat mesylate 60177-36-8, Sorbitan monocaprylate 61270-78-8, Cefonicid sodium 61489-71-2, Menotropin 61869-08-7, Paroxetine 62013-04-1, Dirithromycin 62288-83-9, Desmopressin acetate 62893-19-0, Cefoperazone 63527-52-6, Cefotaxime 64228-81-5, Atracurium besylate 64480-66-6, Glycoursodeoxycholic acid 64544-07-6, Cefuroxime axetil 66376-36-1, Alendronate 66419-50-9, Bovine growth hormone 67352-02-7 67655-94-1, Amastatin 68099-86-5, Bepridil hydrochloride 68401-81-0, Ceftizoxime 68795-69-7, Propylene glycol monocaprate 68958-64-5 69049-74-7, Nedocromil sodium 69070-98-0 69227-93-6, Lauryl beta.-maltopyranoside 69655-05-6, Didanosine 70458-92-3, Peflox 70458-96-7, Norfloxacin 71486-22-1, Vinorelbine 73384-59-5, Ceftriaxone 74011-58-8, Enoxacin 74356-00-6, Cefotetan disodium 70458-92-3, Pefloxacin 74381-53-6, Leuprolide acetate 76420-72-9, Enalaprilat 76470-66-1, 79517-01-4, 78110-38-0, Aztreonam 79350-37-1, Cefixime Loracarbef 79665-92-2 79665-93-3 81161-17-3, Esmolol Octreotide acetate hydrochloride 82410-32-0, Ganciclovir 82419-36-1, Ofloxacin 83869-56-1, Granulocyte-macrophage colony stimulating factor 83905-01-5, Azithromycin 85721-33-1, Ciprofloxacin 87679-37-6, Trandolapril 88669-04-9, Trospectomycin 89703-10-6, FK-448 89987-06-4, Tiludronate 93790-70-6, Cholylsarcosine 93790-72-8, N-Methyltaurocholic acid 93792-59-7, Hydroxypropylmethyl cellulose succinate 94749-08-3, 98079-51-7, Lomefloxacin 100986-85-4, Salmeterol xinafoate Levofloxacin 104227-87-4, Famciclovir 105287-09-0, Aquateric 105462-24-6, Risedronic acid 106392-12-5, Polyoxyethylenepolyoxypropylene block copolymer 106819-53-8, Doxacurium chloride 106861-44-3, Mivacurium chloride 107648-80-6, Cefepime hydrochloride 110871-86-8, Sparfloxacin 113189-02-9, Antihemophilic factor 113852-37-2, Cidofovir 116094-23-6, Insulin aspart 119914-60-2, Grepafloxacin 121368-58-9, Olpadronate 121548-04-7, Gelucire 44/14

THE PROPERTY OF THE PROPERTY O

IT

TT

```
Page 26
     121548-05-8, Gelucire 50/13 124832-26-4, Valaciclovir 126467-48-9,
     Porcine somatotropin 127759-89-1, Lobucavir 133107-64-9, Insulin lispro 134678-17-4, Lamivudine 137862-53-4, Valsartan 138636-14
                                                                  138636-14-3,
     Eudragit NE
                   139110-80-8, Zanamivir 139639-23-9, Tissue type
     plasminogen activator
                             141644-88-4, Hydrotalcite
                                                          142368-40-9, Imwitor
           143003-46-7, Alglucerase 143011-72-7, Granulocyte colony
     stimulating factor 146961-76-4, Alatrofloxacin 147059-72-1,
     Trovafloxacin
                    148046-81-5, Gelucire 33/01 148553-50-8, Pregabalin
     150372-93-3, Glycerox L 151126-32-8, Pramlintide 154361-50-9,
     Capecitabine
                    156259-68-6, Capmul MCM 157810-81-6, Indinavir sulfate
     160337-95-1, Insulin glargine 169148-63-4, Insulin detemir
                                                                     173146-27-5
     , Denileukin diftitox 191588-94-0, TNK-tPA 211365-88-7, Nikkol BPS 30
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (compns. for enhanced absorption of hydrophilic drugs using combination
        of surfactants)
     9001-92-7, Proteinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; compns. for enhanced absorption of hydrophilic drugs using
        combination of surfactants)
     9003-98-9, Dornase
                          11096-26-7, Epoetin
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (.alpha.; compns. for enhanced absorption of hydrophilic drugs using
        combination of surfactants)
RE.CNT 1
```

RE (1) Cho; US 5858398 A 1999 HCAPLUS

ΙT 1309-42-8, Magnesium hydroxide 21645-51-2, Aluminum hydroxide, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. for enhanced absorption of hydrophilic drugs using combination of surfactants)

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

The second secon

1309-42-8 HCAPLUS RN

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO-Mq-OH

21645-51-2 HCAPLUS RN Aluminum hydroxide (Al(OH)3) (9CI) (CA INDEX NAME)

ОН HO-A1-OH

L30ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2002 ACS 2001:31287 HCAPLUS ΑN DN 134:105670 ΤI Pharmaceutical and cosmetic compositions containing oligosaccharide aldonic acids and their topical use Yu, Ruey J.; Van Scott, Eugene J. IN PA SO PCT Int. Appl., 86 pp. CODEN: PIXXD2 DT Patent LA English ICM A61K007-00

62-6 (Essential Oils and Cosmetics)

CC

```
Amines, biological studies
```

(alkoxylated; pharmaceutical and cosmetic compns. contg.

Section cross-reference(s): 1 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----WO 2000-US16301 PΤ WO 2001001932 Α2 20010111 20000628 WO 2001001932 A3 20010517 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 2000-487228 US 6335023 В1 20020101 20000119 US 2002028227 A1 US 2001-987023 20020307 20011113 PRAI US 1999-141264P Ρ 19990630 US 2000-487228 Α 20000119 OS MARPAT 134:105670 Compns. comprising oligosaccharide aldonic acids are useful for AΒ general care, as well as for treatment and prevention, of various cosmeticconditions and dermatol. disorders, including those assocd. with intrinsic and/or extrinsic aging, as well as with changes or damage caused by extrinsic factors; general care, as well as treatment and prevention of diseases and conditions, of the oral, and vaginal mucosa; for general oral care, as well as treatment and prevention of oral and gum diseases; and for wound healing of the skin. Compns. comprising oligosaccharide aldonic acids may further comprise a cosmetic, pharmaceutical or other topical agent to enhance or create synergetic effects. A cream was prepd. by mixing 50 g of 50% maltobionic acid with 50 g oil-in-water base, pH = 1.7. Efficacy of topical maltobionic acid in treatment of dry skin is reported. ST topical pharmaceutical cosmetic oligosaccharide aldonic acid TΤ Amino acids, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (N-acetyl derivs.; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) ΙT Carboxylic acids, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Ph-alpha acyloxy derivs.; pharmaceutical and cosmetic compns . contg. oligosaccharide aldonic acids and their topical use) IT Skin, disease (aging; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) Carbohydrates, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aldonic acids; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

KOSS

```
oligosaccharide aldonic acids and their topical use)
 IT
     Alcohols, biological studies
      Amides, biological studies
      Cyclitols
      RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (amino; pharmaceutical and cosmetic compns. contq.
         oligosaccharide aldonic acids and their topical use) .
 ΙT
      Cosmetics
         (antiaging; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 IT
      Hair preparations
         (conditioners; pharmaceutical and cosmetic compns. contq.
         oligosaccharide aldonic acids and their topical use)
 ΙT
      Skin, disease
         (dry; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 ΙT
      Amino acids, biological studies
      RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (esters; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 ΙT
      Amines, biological studies
      RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (fatty; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 IT
     Keratosis
         (follicularis; pharmaceutical and cosmetic compns. contq.
         oligosaccharide aldonic acids and their topical use)
 ΙT
      Drug delivery systems
         (gels; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 IT
      Carbohydrates, biological studies
      RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (glycosylamines; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
     Carboxylic acids, biological studies
 TΤ
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
      use); BIOL (Biological study); USES (Uses)
         (hydroxy; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 TT
     Keratosis
         (hyperkeratosis, plantar; pharmaceutical and cosmetic compns.
         contg. oligosaccharide aldonic acids and their topical use)
·IT
      Skin, disease
         (ichthyosis; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 IT
      Dermatitis
     Motion sickness
      Seborrhea
      Yeast
         (inhibitors; pharmaceutical and cosmetic compns. contg.
         oligosaccharide aldonic acids and their topical use)
 ΙT
     Keratins
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
      use); BIOL (Biological study); USES (Uses)
```

The second section of the second seco

```
KOSS
```

(keratoses; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) IT (lichen planus; pharmaceutical and cosmetic compns. contq. oligosaccharide aldonic acids and their topical use) ΙT Skin, disease (melasma; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) IT Drug delivery systems (ointments, creams; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) TΤ Carboxylic acids, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oxo; pharmaceutical and cosmetic compns. contq. oligosaccharide aldonic acids and their topical use) IT Amphoteric materials Analgesics Anesthetics Anti-inflammatory agents Antibacterial agents Antiemetics Antihistamines Antioxidants Antiperspirants Antiviral agents Burn Cardiovascular agents Cosmetics Dandruff Eczema Fungicides Hair Human herpesvirus Nail (anatomical) Pruritus Psoriasis Shale oils Skin. Sunscreens Suntanning agents Wart Wound healing (pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) ΙT Coal tar Corticosteroids, biological studies Elastins Esters, biological studies Glycosaminoglycans, biological studies Hormones, animal, biological studies Lactones Oligosaccharides, biological studies Proteoglycans, biological studies Retinoids Salts, biological studies

Vitamins Wood tar

⋆ KOSS

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) ΙT Alkali metal hydroxides Amine oxides Amines, biological studies Imines Peptides, biological studies Polyamines Proteins, general, biological studies RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL -----(Biological study); USES (Uses) (pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) ΙT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (podophyllum; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) IT Cosmetics (skin-lightening; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) Drug delivery systems IT (topical; pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) IT (wrinkle-preventing; pharmaceutical and cosmetic compns. contq. oligosaccharide aldonic acids and their topical use) ΙT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone 21-acetate 50-21-5, Lactic acid, biological studies 50-23-7, Hydrocortisone 50-28-2, Estradiol, biological studies 50-48-6, Amitriptyline 50-78-2, Acetylsalicylic acid 50-81-7, Ascorbic acid, biological studies 51-03-6, Piperonyl butoxide 51-21-8, 5-Fluorouracil 51-55-8, Atropine, biological studies 53-43-0, Dehydroepiandrosterone 53-86-1, 55-56-1, Chlorhexidine 57-13-6, Urea, biological studies Indomethacin 57-63-6, Ethinyl estradiol 58-73-1, Diphenhydramine 58-95-7, Vitamin E acetate 59-33-6, Pyrilamine 59-42-7, Phenylephrine 59-46-1, Procaine 59-33-6, Pyrilamine 59-42-7, Phenylephrine 60-54-8, Tetracycline 64-65-3, Bemegride 65-45-2, Salicylamide 67-78-7, Triamcinolone diacetate 67-73-2, Fluocinolone acetonide 68-35-9, Sulfadiazine 68-41-7, Cycloserine 68-26-8, Retinol 68-95-1, N-Acetylproline 69-72-7, Salicylic acid, adies 76-22-2, Camphor 76-25-5, Triamcinolone acetonide Hydroxyzine biological studies 79-14-1, Glycolic acid, biological studies 79-81-2, Retinyl palmitate 84-22-0, Tetrahydrozoline 86-21-5, Pheniramine Brompheniramine 89-83-8, Thymol 90-45-9, Amin 86-22-6, 90-64-2, 90-45-9, Aminacrine 90-82-4, Pseudoephedrine 93-14-1, Guaifenesin 93-60-7. Mandelic acid 94-24-6, Tetracaine 94-36-0, Benzoyl peroxide, Methyl nicotinate 96-88-8, Mepivacaine 103-16-2, Monobenzone biological studies 108-95-2, Phenol, biological 108-46-3, Resorcinol, biological studies 113-92**-**8 114-07-8, Erythromycin 112-38-9, Undecylenic acid 116-31-4, Retinal 118-56-9, Homosalate 118-60-5, Octyl salicylate 119-36-8, Methyl salicylate 119-61-9, Benzophenone, biological studies 121-29-9, Pyrethrin 123-31-9, Hydroquinone, biological studies 123-31-9D, Hydroquinone, monoether derivs. 123-99-9, Azelaic acid,

127-47-9, Retinyl acetate

136-77-6, Hexylresorcinol

biological studies 124-43-6, Carbamide peroxide

130-26-7, Clioquinol 137-58-6, Lidocaine 1 126-07-8, Griseofulvin

131-57-7, Oxybenzone 137-66-6, Ascorbyl

IT

palmitate 139-12-8, Aluminum acetate 140-65-8, Pramoxine 302-79-4, Retinoic acid 356-12-7, Fluocinonide 382-67-2, Desoximetasone 404-86-4, Capsaicin 443-48-1, Metronidazole 483-63-6, Crotamiton 486-12-4, Triprolidine 499-14-9, Chondrosine 499-15-0, Hyalobiuronic 501-30-4, Kojic acid 518-28-5, Podofilox 525-66-6, Propranolol onic acid 534-74-7, 562-10-7, Doxylamine 534-41-8, Cellobionic acid 534-42-9, Maltobionic acid Isomaltobionic acid 547-64-8, Methyllactate 569-65-3, Meclizine 584-63-4 586-60-7, Dyclonine 721-50-6, Prilocaine 768-94-5, Amantadine 777-11-7, Haloprogin 1143-38-0, 1198-84-1, 4-Hydroxymandelic acid 1319-82-0, Aminocaproic Anthralin 1321-11-5, Aminobenzoic acid 1321-23-9, Chloroxylenol 1327-41-9, Aluminum chlorhydroxide 1400-61-9, Nystatin 1404-04-2, 1490-04-6, 1405-87-4, Bacitracin 1406-18-4, Vitamin e Neomycin Menthol 1491-59-4, Oxymetazoline 1668-19-5, Doxepin 2013-58-3, Meclocycline 2152-44-5, Betamethasone valerate 2398-96-1, Tolnaftate 3380-34-5, Triclosan 3808-00-2 4759-48-2, 13-Cis-Retinoic acid 5466-77-3, Octyl 4-methoxycinnamate 5534-09-8, 5438-68-6 Beclomethasone dipropionate 5551-59-7, Cellobiouronic acid 5593-20-4, Betamethasone dipropionate 5611-51-8, Triamcinolone hexacetonide 5965-65-1, Lactobionolactone 7446-70-0, Aluminum chloride, biological 7512-17-6, N-Acetylglucosamine 7704-34-9, Sulfur, biological studies 7722-84-1, Hydrogen peroxide, biological studies 8029-68-3, studies 9012-76-4, Chitosan 10118-90-8, Minocycline 11103-57-4, Ichthammol Vitamin a 12650-69-0, Mupirocin 13431-32-8 13463-41-7, Zinc pyrithione 13609-67-1, Hydrocortisone 17-butyrate 14838-15-4, Phenylpropanolamine 15686-51-8, Clemastine 15687-27-1, Ibuprofen 16110-51-3, Cromolyn 18323-44-9, Clindamycin 18559-94-9, Albuterol 21245-02-3 **21645-51-2**, Aluminum hydroxide, biological studies 21675-38-7, Melibionic acid 22071-15-4, Ketoprofen 22204-53-1, Naproxen 22916-47-8, Miconazole 23593-75-1, Clotrimazole 25122-46-7, Clobetasol propionate 25655-41-8, Povidone iodine 27220-47-9, 28088-64-4, Aminosalicylic acid 28631-45-0D, lactone from Econazole 29342-05-0, Ciclopirox 30233-46-6 34150-97-5D, lactone from 38396-39-3, Bupivacaine 42776-28-3, 38304-91-5, Minoxidil Maltobionolactone 50612-42-5 52645-53-1, Permethrin 5276 Cellobionolactone 56093-45-9, Selenium sulfide 56933-14-3 52762-22-8, 57524-89-7, Hydrocortisone 17-valerate 59277-89-3, Acyclovir 61318-90-9, Sulconazole 64211-45-6, Oxiconazole 64872-76-0, 65277-42-1, Ketoconazole 65472-88-0, Naftifine Butoconazole 65899-73-2, Tioconazole 67915-31-5, Terconazole 77893-25-5 77893-26-6 91161-71-6, Terbinafine 99011-02-6, Imiquimod 106685-40-9, Adapalene 110558-39-9 110574-00-0 112965-21-6, 118292-40-3, Tazarotene Calcipotriene 184241-84-7 207738-18-9 318471-21-5 318471-22-6 318471-23-7 318471-24-8 318471-25-9 318471-26-0 318471-27-1 318471-28-2 318471-29-3 318471-30-6 318471-31-7 318471-32-8 318471-33-9 318471-34-0 318471-35-1 318471-57-7 318471-36-2 318471-37-3 318471-38-4 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical and cosmetic compns. contg. oligosaccharide aldonic acids and their topical use) 52-90-4, L-Cysteine, biological studies 56-40-6, Glycine, biological 56-85-9, L-Glutamine, biological studies 56-87-1, Lysine, studies 57-00-1, Creatine 60-27-5, Creatinine biological studies 71-00-1, L-Histidine, biological studies 73-22-3, Tryptophan., biological studies 74-79-3, Arginine, biological studies 75-31-0, Isopropylamine, al studies 77-86-1, Tromethamine 78-96-6, Isopropanolamine 102-71-6, Triethanolamine, biological studies 108-18-9, biological studies Diisopropylamine 109-83-1, Methylethanolamine 110-91-8, Morpholine,

The state of the s

```
biological studies
                    110-97-4, Diisopropanolamine
                                                   111-42-2,
Diethanolamine, biological studies 113-00-8D, Guanidine, derivs.
                    122-20-3, Triisopropanolamine
           115-70-8
                                                                127-09-3,
                                                     124-68-5
                144-55-8, Sodium bicarbonate, biological studies
Sodium acetate
147-85-3, L-Proline, biological studies
                                        372-75-8, Citrulline
                                                                 459-73-4,
Glycine ethyl ester
                    488-43-7, Glucamine
                                           497-19-8, Sodium carbonate,
biological studies
                    506-87-6, Ammonium carbonate
                                                   543-38-4, Canavanine
598-41-4, Glycinamide
                      687-64-9, Lysine methyl ester
                                                       1066-33-7,
Ammonium bicarbonate
                       1310-73-2, Sodium hydroxide, biological studies
1336-21-6, Ammonium hydroxide 2812-47-7, Prolinamide
                                                        6169-96-6,
             6284-40-8, N-Methylglucamine 7429-90-5D, Aluminum, salts,
                    7439-93-2D, Lithium., salts
biological studies
                                                  7439-95-4D, Magnesium,
salts, biological studies
                           7440-24-6D, Strontium, salts, biological
          7440-66-6D, Zinc, salts, biological studies
studies
                                                       7440-70-2D,
Calcium, salts, biological studies - -7632-05-5, Sodium phosphate - - -
10124-31-9, Ammonium phosphate 16709-23-2, Argininamide 16889-14-8,
                              20182-63-2, Stearamidopropyl dimethylamine
Stearamidoethyl diethylamine
25497-48-7, Dipropylenetriamine 28299-33-4D, Imidazoline, derivs.
28696-31-3, Arginine ethyl ester 60169-67-7, Proline ethyl ester
            104240-72-4
63224-20-4
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (pharmaceutical and cosmetic compns. contg. oligosaccharide
   aldonic acids and their topical use)
21645-51-2, Aluminum hydroxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
   (pharmaceutical and cosmetic compns. contq. oligosaccharide
   aldonic acids and their topical use)
21645-51-2 HCAPLUS
Aluminum hydroxide (Al(OH)3) (9CI) (CA INDEX NAME)
```

ОН | НО— А1— ОН

ΙT

RN

CN

```
L30
    ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     2001:12218 HCAPLUS
DN
     134:76147
ΤI
     Topical anti-microbial compositions containing pyrithione and
    metal ions
ΙN
     Gavin, David Francis; Marchetta, Anthony Raymond; Nelson, John Daniel;
     Polson, George; Schwartz, James Robert; Turley, Patricia Aileen
PA
     The Procter & Gamble Company, USA; Arch Chemicals, Inc.
SO
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K007-06
         A61K007-48; A61K033-24
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 63
FAN.CNT 2
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                            WO 2000-US17273
                             20010104
                                                             20000623
PΙ
     WO 2001000151
                       Α1
```

```
AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, CZ, DE, DE, DK, DK, DM, EE, EE, ES, FI, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1189581
                       Α1
                            20020327
                                           EP 2000-944806
                                                            20000623
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 2000011852
                            20020430
                                           BR 2000-11852
                       Α
                                                            20000623
PRAI US 1999-141195P
                       Р
                            19990625
     US 2000-599624
                       Α
                            20000622
    WO 2000-US17273
                       W
                            20000623
AB
     Disclosed are topical compns. for the treatment of microbial
     infections on the skin or scalp which include a polyvalent metal salt of
    pyrithione and include a metal ion source. Also disclosed are methods for
     treating microbial infections of the skin or scalp using such
     compns. The efficacy of Zn pyrithione in combination with metal
     ions such as Cu, Zn, Ni, and Hg against Malassezia furfur microorganism.
ST
    topical antimicrobial pyrithione metal ion
ΙT
    Antibacterial agents
    Antimicrobial agents
    Cosmetics
      Hair preparations
     Shampoos
     Surfactants
        (topical anti-microbial compns. contg. pyrithione and metal
        ions)
ΙT
     Coal tar
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (topical anti-microbial compns. contg. pyrithione and metal
        ions)
IT
     Drug delivery systems
        (topical; topical anti-microbial compns. contg. pyrithione
        and metal ions)
TΤ
    Tannins
    RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (zinc salts; topical anti-microbial compns. contq. pyrithione
        and metal ions)
     13463-41-7, Zinc pyrithione
IT
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (topical anti-microbial compns. contg. pyrithione and metal
        ions)
IT
    14807-96-6, Talc, biological studies
                                          65277-42-1, Ketoconazole
    84625-61-6, Itraconazole
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
    THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (topical anti-microbial compns. contg. pyrithione and metal
        ions)
ΙT
    546-46-3, Zinc citrate
                            547-68-2, Zinc oxalate
                                                      551-64-4, biological
               556-38-7, Zinc valerate
                                        557-05-1, Zinc stearate
                                                                   557-07-3,
                   557-08-4, Zinc undecylenate 557-28-8, Zinc propionate
     Zinc oleate
     557-34-6, Zinc acetate
                             1314-13-2, Zinc oxide, biological studies
```

```
1314-98-3, Zinc sulfide, biological studies 1317-39-1, Cuprous oxide,
    biological studies 1332-40-7, Copper oxychloride 1344-67-8, Copper
                                          4468-02-4, Zinc gluconate
               3486-35-9, Zinc carbonate
    7439-97-6D, Mercury, salts, biological studies
                                                    7440-02-0D, Nickel,
    salts, biological studies
                                7440-22-4D, Silver, salts, biological studies
    7440-43-9D, Cadmium, salts, biological studies 7440-50-8D, Copper,
    salts, biological studies 7440-66-6D, Zinc, salts, biological studies
    7440-69-9D, Bismuth, salts, biological studies 7447-39-4, Cupric
    chloride, biological studies
                                   7487-88-9, Magnesium sulfate, biological
              7492-68-4, Copper carbonate 7646-85-7, Zinc chloride,
    biological studies
                         7733-02-0, Zinc sulfate 7758-89-6, Copper chloride
    7758-98-7, Copper sulfate, biological studies '7779-90-0, Zinc phosphate
    7783-49-5, Zinc fluoride
                               7785-87-7, Manganese sulfate 7787-60-2,
                       8012-69-9, Copper oxychloride sulfate 10139-47-6,
    Bismuth chloride
    Zinc iodide
                  10294-26-5, Silver sulfate 11126-29-7, Zinc silicate
    13426-91-0, Copper ethylenediamine complex 13597-54-1, Zinc
              16039-53-5, Zinc lactate 16283-36-6, Zinc salicylate
    20427-58-1, Zinc hydroxide 20427-59-2, Cupric hydroxide
    26656-82-6, Copper thiocyanate 31089-39-1, Copper triethanolamine
    41229-70-3, Cuprous ammonium carbonate 56093-45-9, Selenium sulfide
    73342-99-1
    RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (topical anti-microbial compns. contg. pyrithione and metal
        ions)
RE.CNT
       3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.
(1) Beecham Group; EP 0077630 A 1983 HCAPLUS
(2) Kooistra, J; US 3852441 A 1974 HCAPLUS
(3) Wiese, R; US 5227156 A 1993 HCAPLUS
    20427-58-1, Zinc hydroxide 20427-59-2, Cupric hydroxide
TT
    RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (topical anti-microbial compns. contg. pyrithione and metal
       ions)
    20427-58-1 HCAPLUS
RN
CN
    Zinc hydroxide (Zn(OH)2) (9CI) (CA INDEX NAME)
HO-Zn-OH
    20427-59-2 HCAPLUS
RN
CN
    Copper hydroxide (Cu(OH)2) (8CI, 9CI) (CA INDEX NAME)
```

HO-Cu-OH

```
L30 · ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     2000:383884 HCAPLUS
DN
    133:22149
    Hair dye compositions containing oxidoreductase and
ΤI
    mediators
     Sorensen, Niels Henrik; McDevitt, Jason Patrick
ΙN
PA
     Novo Nordisk A/S, Den.
     PCT Int. Appl., 96 pp.
     CODEN: PIXXD2
DT
     Patent
```

```
KOSS
        09/931914
                                   Page 35
LA
     English
     ICM A61K007-13
IC
     ICS A61K007-09
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                                                           DATE
     ______
                           -----
                                          -----
                      A1
                                          WO 1999-DK674
ΡI
    WO 2000032158
                           20000608
                                                           19991201
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1137391
                                        EP 1999-957262
                      A1 20011004
                                                           19991201
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI US 1998-203075
                     Α
                           19981201
    WO 1999-DK674
                     W
                           19991201
AΒ
    A method for treating hair, combining permanent dyeing and
    straightening of hair, without significantly damaging the
    hair is disclosed. The hair is treated by chem.
    reducing covalent disulfide linkages in the hair, and contacting
    said hair with at least 1 oxidoreductase, at least 1 mediator,
    and at least 1 chem. oxidizing agent in an amt. equiv. to 0.001-1%
    hydrogen peroxide of the dyeing formulation. The efficiency of dyeing of
    blonde hair was improved when dyeing was performed on chem.
    straightened hair relative to-untreated hair.
    hair dye oxidoreductase mediator; oxidase hair dye
ST
    mediator
ΙT
    Phenols, biological studies
     Phenols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (amino; hair dye compns. contg. oxidoreductase and
        mediators)
IT
    Amines, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (diamines; hair dye compns. contg. oxidoreductase
        and mediators)
IT
    Hair preparations
        (dyes, oxidative; hair dye compns. contg.
        oxidoreductase and mediators)
IT
    Hair preparations
        (dyes; hair dye compns. contg. oxidoreductase and
       mediators)
IT
    Hair
        (hair dye compns. contg. oxidoreductase and
       mediators)
```

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(hair dye compns. contg. oxidoreductase and

Phenols, biological studies

Amines, biological studies Amines, biological studies

mediators)

IT

IT

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (phenolic; hair dye compns. contq. oxidoreductase and mediators) 60-18-4, L-Tyrosine, biological studies 81-11-8, 4,4'-Diaminostilbene-ΙT 2,2'-disulfonic acid 84-08-2 84-97-9, 10-[3-(4-Methyl-1piperazinyl)propyl]phenothiazine 92-87-5, Benzidine 92-88-6, [1,1'-Biphenyl]-4,4'-diol 99-96-7, 4-Hydroxybenzoic acid, biological 106-50-3, p-Phenylenediamine, biological studies 5-Amino-2-naphthalenesulfonic acid 119-90-4, 3.3'-Dimethoxybenzidine 119-93-7, 3,3'-Dimethylbenzidine 123-30-8, p-Aminophenol 130-17-6 134-96-3, Syringaldehyde 256-96-2, Iminostilbene 327-97-9, Chlorogenic 331-39-5, Caffeic acid 362-03-8, 10-Phenothiazinepropionic acid 362-04-9, Methyl 10-phenothiazinepropionate 494-44-0, 7-Amino-2-naphthalenesulfonic acid 525-64-4, 2,7-Diaminofluorene 530-57-4, Syringic acid 530-59-6, Sinapic acid 537-65-5, 4,4'-Diaminodiphenylamine 591-27-5, 3-Aminophenol 603-34-9, 611-99-4, 4,4'-Dihydroxybenzophenone 884-35-5, Triphenylamine Methylsyringate 1135-24-6, Ferulic acid 1207-72-3, 1637-16-7, 10-Ethylphenothiazine 1696-60-2, 10-Methylphenothiazine Vanillin azine 1749-04-8, N-[4-(Dimethylamino)benzylidene]-p-anisidine 2243-62-1, 1,5-Diaminonaphthalene 2478-38-8, Acetosyringone 2814-61-1, 2,2'-Azinobis(3-ethylbenzothiazoline6-sulfonate 3943-80-4, Ethyl syringate 5060-82-2, 7-Methoxy-2-naphthol 6972-56-1, 1H-Naphth[1,2-d]imidazol-7-ol 7046-84-6, 10-(2-Hydroxyethyl)phenothiazine 7152-42-3, 10-Phenylphenothiazine 7570-37-8, 4-Amino-4'-methoxystilbene 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0, Peroxidase 9035-73-8, Oxidase 11138-47-9, Sodium perborate 13924-28-2, N-Benzylidene-4-biphenylamine 15375-48-1, 10-Propylphenothiazine 16712-64-4, 6-Hydroxy-2-naphthoic 20962-92-9, 17427-04-2, 10-Isopropylphenothiazine 21977-42-4, 10-Phenoxazinepropionic 10-Allylphenothiazine 21429-17-4 25324-52-1, 2-Acetyl-10-methylphenothiazine 25782-99-4, 10-Methylphenoxazine 27151-57-1, 4,4'-Dimethoxy-N-methyldiphenylamine 54827-17-7, 3,3',5,5'-Tetramethylbenzidine 58574-03-1, 4'-Hydroxy-4-biphenylcarboxylic acid 60411-11-2, 10-Ethyl-4-63397-92-2, 10-(3phenothiazinecarboxylic acid 69113-98-0 72684-97-0, Propyl syringate Hydroxypropyl) phenothiazine 90510-22-8, Hexyl syringate 92199-64-9, 80498-15-3, Laccase 10-(2-Hydroxyethyl)phenoxazine 136832-74-1 177959-98-7, Butyl syringate 177959-99-8, Octyl syringate RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair dye compns. contg. oxidoreductase and mediators) 113-00-8D, Guanidine, quaternized, hydroxides 1305-62-0 TΤ , Calcium hydroxide (Ca(OH)2), processes 1310-73-2, Sodium hydroxide, processes RL: PEP (Physical, engineering or chemical process); PROC (Process) (hair dye compns. contg. oxidoreductase and mediators) THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE (1) Eugene, Z; US 3957424 A 1976 HCAPLUS (2) Goldwell Aktiengesellschaft; EP 0548620 Al 1993 HCAPLUS (3) L'Oreal; FR 2694018 A1 1994 HCAPLUS (4) Novo Nordisk AS; WO 9610079 A1 1996 HCAPLUS (5) Novo Nordisk AS; WO 9815257 A1 1998 HCAPLUS (6) Novo Nordisk AS; WO 9958013 A1 1999 HCAPLUS (7) Yoshio; US 4961925 A 1990 HCAPLUS

KOSS 09/931914 Page 37 1305-62-0, Calcium hydroxide (Ca(OH)2), processes TΤ RL: PEP (Physical, engineering or chemical process); PROC (Process) (hair dye compns. contg. oxidoreductase and mediators) 1305-62-0 HCAPLUS RN CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME) HO-Ca-OH L30 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2002 ACS 1999:636065 HCAPLUS AN DN 131:248035 TΤ Alkaline hair-conditioning compositions containing cationic guar ΤN Varco, Joseph J. PΑ Bristol-Myers Squibb Co., USA SO Eur. Pat. Appl., 10 pp. CODEN: EPXXDW DT Patent LA English ICM A61K007-09 IC CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----EP 943315 A2 EP 943315 A3 19990922 EP 1999-200643 19990304 20010829 IE, SI, LT, LV, FI, RO Ä US 6010690 20000104 --- US 1998-35392-19980-305 BR 9900880 20000328 Ά 19990304

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, BR 1999-880 PRAI US 1998-35392 19980305

MARPAT 131:248035

The invention provides compns. for relaxing and conditioning keratinous fibers, particularly human hair. The compns. of the present invention have a high pH, i.e., a pH greater than 10, preferably, in the range of about 11 to about 14, more preferably about 12 to about 13.5; and include as a conditioning additive a cationic guar. Surprisingly, the cationic guar maintains stability, viscosity and activity over time in the highly alk. pH of the inventive hair relaxer and conditioning compns. of the present invention. The relaxer compns. of the present invention afford beneficial effects to the user, such as softness and ease of wet combing, and cause less damage to hair following application and use. In addn., the conditioning relaxer compns. of the present invention remain on the hair and provide lasting conditioning and relaxing effects after one or more shampoos.

hair conditioner cationic guar alk hydroxide ST

TT Alkaline earth hydroxides Amines, biological studies Quaternary ammonium compounds, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(alk. hair-conditioning compns. contg. cationic guar)

IT Hair preparations

KOSS 09/931914 Page 38 (conditioners; alk. hair-conditioning compns. contg. cationic guar) IT 64-67-5, Ethyl sulfate 1305-62-0, Calcium hydroxide, biological 1310-58-3, Potassium hydroxide, biological studies 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, biological studies 17194-00-2, Barium hydroxide 18480-07-4, Strontium 65497-29-2, Guar hydroxypropyltrimonium chloride hydroxide 81859-24-7, Polyquaternium 10 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (alk. hair-conditioning compns. contg. cationic guar) 1305-62-0, Calcium hydroxide, biological studies ΙT 17194-00-2, Barium hydroxide 18480-07-4, Strontium hydroxide RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (alk. hair-conditioning compns. contg. cationic guar) RN 1305-62-0 HCAPLUS CN Calcium hydroxide (Ca(OH)2) (-9CI-)- (-CA INDEX NAME) HO-Ca-OH 17194-00-2 HCAPLUS RN CN Barium hydroxide (Ba(OH)2) (9CI) (CA INDEX NAME) но-ва-он RN 18480-07-4 HCAPLUS CN Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME) HO-Sr-OH ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2002 ACS L30 1998:681931 HCAPLUS ANDN 129:306297 ΤI Shampoo compositions for decreasing combing damage Syed, Ali N.; Ahmad, Kaleem IN PA Avlon Industries, Inc., USA U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 267,829, abandoned. SO CODEN: USXXAM DTPatent English LA ICM A61K007-06 IC ICS A61K007-09 NCL 424070400

FAN.	CNT 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 5824295	Α	19981020	US 1996-627345	19960404		
	ZA 9509299	A	19970505	ZA 1995-9299	19951103		

62-3 (Essential Oils and Cosmetics)

CC

The same place of the same of

```
PRAI US 1994-267829
                       B2
                            19940629
     A compn. for treating hair includes at least 1 of the
     following: a cationic polymer made from the reaction of secondary amines
     with epihalohydrin and further crosslinked with the addn. of a small amt.
     of ethylene diamine; poly(dimethylaminoethyl methacrylate) and 1 of a
     precomponent of an active hair relaxing ingredient,
     quanidine hydroxide or a shampoo base; Polyquaternium 10 and at least 1 of
     an active hair relaxing ingredient and an active
     hair relaxing ingredient; and-Polyquaternium 32 and
     mineral oil. A method of using at least 1 of a cationic polymer,
     poly(dimethylaminoethyl methacrylate), Polyquaternium 10 or Polyquaternium
     32 includes the steps of applying 1 of the above to hair that is
     in risk of damage from a cosmetic procedure and exposing the hair
     to a cosmetic procedure. Thus, a shampoo contained water 79.3,
     methylparaben 0.2, propylparaben 0.1, imidiazolidinylurea 0.35,
     disodium-EDTA 0.2, citric acid 1.6, Betz-1195 2,
     cocoamphocarboxypropionate 8, ammonium lauryl sulfate 0.75, cocoamide
    diethanolamine 4, Polysorbate-20 3 and fragrance 0.5% by wt.
ST
     shampoo hair combing damage cationic polymer
IT
     Onium compounds
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (1-[2-(carboxymethoxy)ethyl]-1-(carboxymethyl)-4,5-dihydro-2-norcoco
        alkyl imidazolium, inner salts, disodium salts; shampoo compns
        . for decreasing hair combing damage)
IT
     Polyelectrolytes
        (cationic; shampoo compns. for decreasing hair
        combing damage)
     Amides, biological studies
ΙT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (coco, N, N-bis(hydroxyethyl); shampoo compns. for decreasing
        hair combing damage)
ΙT
     Hair preparations
        (conditioners; shampoo compns. for decreasing hair
        combing damage)
     Alcohols, biological studies
ΙT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polyhydric; shampoo compns. for decreasing hair
        combing damage)
ΙT
     Hair
     Shampoos
        (shampoo compns. for decreasing hair combing
ΙT
     Alkaline earth hydroxides
     Glycols, biological studies
     Paraffin oils
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (shampoo compns. for decreasing hair combing
        damage)
                                            77-92-9, Citric acid, biological
IT
     56-81-5, Glycerin, biological studies
               94-13-3, Propylparaben 99-76-3, Methylparaben
                                                                 139-33-3,
     studies
     Disodium EDTA 1305-62-0, Calcium hydroxide, biological studies
     2235-54-3, Ammonium lauryl sulfate 9005-64-5, Polysorbate 20
     24938-91-8, Salcare SC95
                                26161-33-1, Polyquaternium 37
     Polyquaternium 32
                         39236-46-9, Imidazolidinylurea
                                                        81859-24-7,
     Polyquaternium 10
                         86752-73-0, Betz 1195 100224-74-6, Guanidine
     carbonate
```

```
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (shampoo compns. for decreasing hair combing
        damage)
TT
     1305-62-0, Calcium hydroxide, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (shampoo compns. for decreasing hair combing
        damage)
    1305-62-0 HCAPLUS
RN
CN
    Calcium hydroxide (Ca(OH)2) (9CI)
                                        (CA INDEX NAME)
HO-Ca-OH
    ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
ΑN
     1997:549291 HCAPLUS
    127:152801
DN
TI
    Hair coloring compositions
IN
     Dias, Louis Carlos; Pullan, Rowena Juliet Flux; Sanger, Alison Jane
PA
     Procter & Gamble Company, USA; Dias, Louis Carlos; Pullan, Rowena Juliet
     Flux; Sanger, Alison Jane
    PCT Int. Appl., 54 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
    WO 9724105
                      A1
                            19970710
                                           WO 1996-US20167
                                                             19961217
        W: BR, CN, JP, MX, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     CN 1209052
                            19990224
                                           CN 1996-180116
                                                             19961217
                       Α
    EP 918503
                            19990602
                                           EP 1996-943802
                                                             19961217
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    BR 9612322
                            19990713
                                          BR 1996-12322
                                                             19961217
                       Α
     JP 11509235
                       Т2
                            19990817
                                           JP 1996-524403
                                                             19961217
    US 6022381
                                           US 1998-91441
                       Α
                            20000208
                                                             19980629
PRAI GB 1995-26711
                            19951229
    WO 1996-US20167
                          19961217
    A hair coloring compn. comprising: (a) an org.
    peroxyacid oxidizing agent; and (b) one or more oxidative hair
     coloring agents. The products can provide excellent hair
     coloring and in-use efficacy benefits including excellent initial color-
     and good wash fastness in combination with reduced hair damage
    at lower pH. Example oxidizing agents are peracetic acid, oxidative dyes:
     p-phenylenediamine; nonoxidative dyes: Basic red 76; chelating agent,
    EDTA; enzyme horseradish peroxidase; surfactant: cetereth-25; thickener
    cetyl alc. and antioxidant sodium sulfite. .
    hair coloring compn; peroxyacid hair
ST
     coloring compn
    Alcohols, biological studies
TT
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     BIOL (Biological study); USES (Uses)
        (C16-18, ethoxylated; hair coloring compns.)
```

```
ΙT
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (amino; hair coloring compns.)
    Amines, biological studies.
TT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (diamines; hair coloring compns.)
ΙT
    Hair preparations
        (dyes; hair coloring compns.)
ΙT
    Antioxidants
    Buffers
    Oxidizing agents
    Surfactants
    Thickening agents
        (hair coloring compns.)
IT
    Amino acids, biological studies
    Enzymes, biological studies
       Hydroxides (inorganic)
     Peroxy acids
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair coloring compns.)
ΙT
    Amines, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyamines, nonpolymeric; hair coloring compns.)
    74-79-3, L-Arginine, biological studies 79-21-0, Peracetic acid
    106-50-3, p-Phenylenediamine, biological studies 123-30-8, p-Aminophenol
    151-21-3, Sodium lauryl sulfate, biological studies 591-27-5 3058-35-3, Nonaneperoxoic acid 16867-03-1, 2-Amino-3-hydroxypyridine
    26381-41-9, Basic brown 16
                                  36574-66-0D, N-coco acyl derivs.
    68391-30-0, Basic red 76
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair coloring compns.)
    56-87-1, Lysine, biological studies 60-00-4, EDTA, biological studies
IT
    71-00-1, Histidine, biological studies 75-04-7, Ethylamine, biological
              108-01-0, 2-(Dimethylamino)ethanol 109-76-2,
    1,3-Propanediamine 110-91-8, Morpholine, biological studies
                                                                      111-42-2,
    Diethanolamine, biological studies 112-92-5, Stearyl alcohol
                                         141-43-5, Monoethanolamine, biological
    Triethylamine, biological studies
                                        144-55-8, Sodium bicarbonate,
              142-84-7, Dipropylamine
    biological studies 471-34-1, Calcium carbonate, biological studies
    497-19-8, Sodium carbonate, biological studies 506-87-6, Ammonium
                 584-08-7, Potassium carbonate 1066-33-7, Ammonium
    bicarbonate 1305-62-0, Calcium hydroxide, biological studies
    1309-42-8, Magnesium hydroxide 1310-58-3, Potassium hydroxide,
                        1310-73-2, Sodium hydroxide, biological studies
    biological studies
    1336-21-6, Ammonium hydroxide 3983-19-5, Calcium bicarbonate
    6000-08-4, HydrOxylysine 7757-83-7, Sodium sulfite
                                                            9003-99-0,
                  36653-82-4, Cetyl alcohol
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
    BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
    1305-62-0, Calcium hydroxide, biological studies 1309-42-8
IT
     , Magnesium hydroxide
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
    BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
```

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

но-Са-ОН

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO-Mg-OH

```
ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
     1997:549287 HCAPLUS
ΑN
     127:152799
DN
    Hair coloring compositions
TΙ
IN
     Dias, Louis Carlos; Pullan, Rowena Juliet Flux; Sanger, Alison Jane
     Procter & Gamble Company, USA; Dias, Louis Carlos; Pullan, Rowena Juliet
PA
     Flux; Sanger, Alison Jane
     PCT Int. Appl., 62 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                             DATE
    WO 9724107
                      A1
                            19970710
                                           WO 1996-US20185
                                                             19961217
PT
        W: BR, CN, JP, MX, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     EP 876134
                           19981111
                                           EP 1996-944867
                                                             19961217
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                            19990224
    CN 1209053
                       Α
                                           CN 1996-180117
                                                             19961217
    BR 9612388
                       Α
                            19990713
                                           BR 1996-12388
                                                             19961217
                            19990817
                                           JP 1996-524409
     JP 11509236
                       Т2
                                                             19961217
                            19991221
                                           US 1998-91440
                                                             19980629
    US 6004355
                       Α
PRAI GB 1995-26632
                            19951229
    WO 1996-US20185
                            19961217
    A hair coloring compn. contains: (a) a water-sol.
     peroxygen oxidizing agent; (b) an org. peroxyacid oxidizing aid; and (c)
    one or more oxidative hair coloring agents. The products can
     provide excellent hair coloring and in-use efficacy benefits
     including excellent initial color and good wash fastness in combination
    with reduced hair damage at lower pH. Example oxidizing agent
     is hydrogen peroxide, peroxyacid precursor: sodium
    nonanoylbenzenesulfonate, and oxidative dye: p-phenylenediamine.
ST
    hair coloring compn; peroxyacid oxidizing hair
     coloring
IT
    Alcohols, biological studies
     Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C16-18, ethoxylated; hair coloring compns.)
IT
    Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

(Uses)

```
(amino; hair coloring compns.)
    Amines, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (diamines; hair coloring compns.)
IT
    Hair preparations
        (dyes; hair coloring compns.)
ΙT
    Buffers
    Oxidizing agents
    Surfactants
        (hair coloring compns.)
IT
    Hydroxides (inorganic)
     Peroxy acids
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair coloring compns.)
ΙT
    Amines, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyamines, nonpolymeric; hair coloring compns.)
    77-89-4, Acetyl triethyl citrate 79-21-0, Peracetic acid
ΙT
                                                                  106-50-3,
    p-Phenylenediamine, biological studies
                                              123-30-8, p-Aminophenol
                1066-33-7, Ammonium bicarbonate 1310-58-3, Potassium
    591-27-5
    hydroxide, biological studies
                                     3058-35-3, Nonaneperoxoic acid
    7722-84-1, Hydrogen peroxide, biological studies
                                                        16867-03-1,
    2-Amino-3-hydroxypyridine
                                 26381-41-9, Basic brown 16
                                                              36574-66-0D,
                           68391-30-0, Basic red 76
                                                      91125-43-8, Sodium
    N-coco acyl derivs.
    nonanoyloxybenzenesulfonate
                                  101482-85-3
                                                 173740-85-7
                                                               173740-86-8
    173740-87-9
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair coloring compns.)
IT
    56-87-1, L-Lysine, biological studies
                                             60-00-4, EDTA, biological studies
    71-00-1, L-Histidine, biological studies
                                                74-79-3, L-Arginine, biological
               75-04-7, Ethylamine, biological studies
                                                         108-01-0,
    Dimethylaminoethanol 109-76-2, 1,3-Propanediamine 110-91-8, Morpholine, biological studies 111-40-0, Diethylenetriamine 111-42-2,
    Diethanolamine, biological studies
                                         112-92-5, Stearyl alcohol
                                                                     121-44-8,
    Triethylamine, biological studies
                                         141-43-5, Monoethanolamine, biological
               142-84-7, Dipropylamine
    studies
                                         144-55-8, Sodium bicarbonate,
                          151-21-3, Sodium lauryl sulfate, biological studies
    biological studies
    471-34-1, Calcium carbonate, biological studies
                                                       497-19-8, Sodium
    carbonate, biological studies
                                     506-87-6, Ammonium carbonate
                                                                    584-08-7,
    Potassium carbonate 1305-62-0, Calcium hydroxide, biological
    studies 1309-42-8, Magnesium hydroxide
                                             1310-73-2, Sodium
    hydroxide, biological studies 1336-21-6, Ammonium hydroxide
                                                                      3983-19-5,
                                                      7664-38-2, Phosphoric
    Calcium bicarbonate
                           6000-08-4, Hydroxylysine
                                7757-83-7, Sodium sulfite
    acid, biological studies
                  36653-82-4, Cetyl alcohol
    Peroxidase
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
    BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
    1305-62-0, Calcium hydroxide, biological studies 1309-42-8
ΙT
     , Magnesium hydroxide
    RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
    BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
RN
    1305-62-0 HCAPLUS
    Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
CN
```

TT

(Uses)

```
HO-Ca-OH
     1309-42-8 HCAPLUS
RN
     Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)
CN
HO-Mg-OH
     ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
ΑN
     1997:549285 HCAPLUS
DN
     127:166522
ΤI
     Hair coloring compositions
IN
     Dias, Louis Carlos; Murray, Pauline; Pullan, Rowena Juliet Flux; Sanger,
PA
     Procter & Gamble Company, USA; Dias, Louis Carlos; Murray, Pauline;
     Pullan, Rowena Juliet Flux; Sanger, Alison Jane
SO
     PCT Int. Appl., 61 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61K007-13
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                            -----
                                           _____
                                         WO 1996-US20170 19961217
PΙ
                     A1
                            19970710
     WO 9724106
        W: BR, CN, JP, MX, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                     A1 19981125
                                     EP 1996-944861
     EP 879045
                                                           19961217
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     CN 1209055 A 19990224
                                          CN 1996-180118
                                                            19961217
                            19990224
                                           CN 1996-180119
     CN 1209054
                      Α
                                                            19961217
                                           BR 1996-12328
     BR 9612328
                           19990302
                      Α
                                                            19961217
     JP 3045400
                      В2
                            20000529
                                           JP 1997-524405
                                                            19961217
     JP 11501947
                      T2
                            19990216
                     A
PRAI GB 1995-26633
                            19951229
     WO 1996-US20170 W
                            19961217
AB
     A hair coloring compn. comprising: (a) a water-sol.
     peroxygen bleach; (b) a bleaching aid selected from org. peroxyacid bleach
     precursors and/or preformed org. peroxyacids; (c) one or more hair coloring agents. The products can provide excellent hair
     coloring and in-use efficacy benefits including excellent initial color
     and good wash fastness in combination with reduced hair damage
     at lower pH. Example peroxygen bleach is hydrogen peroxide, peroxyacid
     precursor is sodium nonanoylbenzenesulfonate, and oxidative dye
     p-phenylenediamine.
     hair coloring compn; peroxy bleach hair
ST
     coloring compn
     Alcohols, biological studies
ΙT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (amino; hair coloring compns.)
```

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

Amines, biological studies

```
(diamines; hair coloring compns.)
ΙT
     Hair preparations
        (dyes; hair coloring compns.)
ΙT
     Bleaching agents
     Buffers
     Surfactants
     Swelling agents
        (hair coloring compns.)
IT
     Amino acids, biological studies
       Hydroxides (inorganic)
     Peroxy acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair coloring compns.)
                                 IT
     77-89-4, Acetyl triethyl citrate 79-21-0, Peracetic acid 108-46-3,
     Resorcinol, biological studies 123-30-8, p-Aminophenol 591-27-5 3058-35-3, Nonaneperoxoic acid 7722-84-1, Hydrogen peroxide, biological
                                            68391-30-0, Basic red 76
               26381-41-9, Basic brown 16
     studies
     91125-43-8, Sodium nonanoyloxybenzenesulfonate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair coloring compns.)
ΙT
     56-87-1, L-Lysine, biological studies 60-00-4, Edta, biological studies
     71-00-1, L-Histidine, biological studies 74-79-3, L-Arginine, biological
             75-04-7, Ethylamine, biological studies 106-50-3,
     p-Phenylenediamine, biological studies
                                              108-01-0, Dimethylaminoethanol
     109-76-2, 1,3-Propanediamine 110-91-8, Morpholine, biological studies
     111-40-0, Diethylenetriamine 111-42-2, Diethanolamine, biological
               121-44-8, Triethylamine, biological studies 141-43-5,
    Monoethanolamine, biological studies 142-84-7, Dipropylamine 144-55-8,
     Sodium bicarbonate, biological studies 151-21-3, Sodium lauryl sulfate,
                          471-34-1, Calcium carbonate, biological studies
     biological studies
     497-19-8, Sodium carbonate, biological studies
                                                        506-87-6, Ammonium
                 584-08-7, Potassium carbonate
                                                 1066-33-7, Ammonium
     carbonate
    bicarbonate 1305-62-0, Calcium hydroxide, biological studies
    1309-42-8, Magnesium hydroxide 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies
     1336-21-6, Ammonium hydroxide 3983-19-5, Calcium bicarbonate
     6000-08-4, HydrOxylysine
                                 7664-38-2, Phosphoric acid, biological studies
     9003-99-0, Peroxidase
                             26027-38-3, Nonoxynol-9
                                                       36574-66-0D, N-coco acyl
     derivs.
               101482-85-3
                              173740-85-7
                                            173740-86-8
                                                         173740-87-9
     193487-42-2, Aculyn 44
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
IT
    1305-62-0, Calcium hydroxide, biological studies 1309-42-8
     , Magnesium hydroxide
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     BIOL (Biological study); USES (Uses)
        (hair coloring compns.)
RN
     1305-62-0 HCAPLUS
CN
    Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
HO− Са− ОН
RN
     1309-42-8 HCAPLUS
    Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)
CN
```

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

HO-Mg-OH

```
ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
    1997:547307 HCAPLUS
AN
DN
    127:152800
ΤI
    Hair bleaching compositions
IN
    Dias, Louis Carlos; Murray, Pauline; Pullan, Rowena Juliet Flux; Sanger,
    Alison Jane
PΑ
    Procter & Gamble Company, USA; Dias, Louis Carlos; Murray, Pauline;
    Pullan, Rowena Juliet Flux; Sanger, Alison Jane
    PCT Int. Appl., 57 pp.
SO
    CODEN: PIXXD2
DT
    Patent
T.A
    English
    ICM A61K007-135
IC
CC
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 2
    PATENT NO.
                     KIND DATE
                                         APPLICATION NO.
                                                          DATE
    -----
                                         _____
                     ----
                          -----
                                                         _____
PΙ
    WO 9724108
                    A1
                          19970710
                                         WO 1996-US20169 19961217
        W: BR, CN, JP, MX, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                     A1 19981014 EP 1996-944860
    EP 869769
                                                        19961217
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    CN 1209055
                           19961217
                    A
                           19990224
                                         CN 1996-180119
    CN 1209054
                     Α
                                                          19961217
    BR 9612384
                     Α
                           19990713
                                         BR 1996-12384
                                                          19961217
    JP 2002509519
                     Т2
                           20020326
                                         JP 1997-524404
                                                          19961217
PRAI GB 1995-26633
                           19951229
                     Α
    WO 1996-US20169
                    W
                           19961217
    A hair bleaching compn. comprising: (a) a water-sol.
AB
    peroxygen bleach; and (b) a bleaching aid selected from org. peroxyacid
    bleach precursors and/or preformed org. peroxyacids. The products can
    provide excellent hair bleaching and in-use efficacy benefits
    including reduced hair damage at lower pH.
ST
    hair bleach formulation
ΙT
    Hair preparations
        (bleaches; hair bleaching compns.)
    Buffers
ΙT
    Surfactants
    Swelling agents
        (hair bleaching compns.)
    Alkali metal hydroxides
    Alkaline earth hydroxides
    Enzymes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
        (hair bleaching compns.)
ΙT
    Peroxy acids
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES_
    (Uses)
        (org.; hair bleaching compns.)
    75-04-7, Ethylamine, biological studies 121-44-8, Triethylamine,
ΙT
    biological studies 142-84-7, Dipropylamine
                                                  1336-21-6, Ammonium
    hydroxide 7664-38-2, Phosphoric acid, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
```

```
(buffer; hair bleaching compns.)
     56-87-1, Lysine, biological studies 71-00-1, Histidine, biological
              74-79-3, Arginine, biological studies 77-89-4, Acetyl
     triethylcitrate 79-21-0, Peracetic acid 108-01-0, Dimethylaminoethanol
     109-76-2, 1,3-Diaminopropane 110-91-8, Morpholine, biological studies
     111-40-0, Diethylenetriamine 111-42-2, Diethanolamine, biological
     studies 141-43-5, Ethanolamine, biological studies
                                                          144-55-8, Sodium
    hydrogen carbonate, biological studies 471-34-1, Calcium carbonate,
    biological studies 497-19-8, Sodium carbonate, biological studies
     506-87-6, Ammonium carbonate 584-08-7, Potassium carbonate
    Ammonium hydrogen carbonate 1190-94-9, Hydroxylysine 1305-62-0
     , Calcium hydroxide, biological studies 1309-42-8, Magnesium
                1310-58-3, Potassium hydroxide, biological studies
     1310-73-2, Sodium hydroxide, biological studies 3058-35-3, Pernonanoic
           3983-19-5, Calcium hydrogen carbonate
                                                  10543-57-4, Tetraacetyl
     ethylene diamine 101482-85-3--173740-85-7
                                                   173740-87-9
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair bleaching compns.)
     1305-62-0, Calcium hydroxide, biological studies 1309-42-8
ΙT
     , Magnesium hydroxide
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair bleaching compns.)
    1305-62-0 HCAPLUS
RN
    Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
CN
HO-Ca-OH
    1309-42-8 HCAPLUS
RN
    Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)
CN
HO-Mg-OH
L30
    ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2002 ACS
AN
     1997:411007 HCAPLUS
DN
    127:99524
ΤI
    Hair strengthening composition containing cationic
     polyquaternary polymers
     Syed, Ali N.; Ahmad, Kaleem
ΙN
PΑ
    Avlon Industries, Inc., USA
SO
     U.S., 9 pp.
     CODEN: USXXAM
DT
    Patent
LA
    English
IC
     ICM A61K007-09
NCL
     424070170
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
                                          APPLICATION NO.
                     KIND
     PATENT NO.
                           DATE
     US 5639449
                      Α
                            19970617
                                          US 1994-292107
                                                           19940817
                      A
                                          US 1995-493491
                                                           19950622
     US 5641478
                            19970624
     ZA 9509298
                      Α
                            19970505
                                           ZA 1995-9298
                                                           19951103
PRAI US 1994-292107
                      A3
                            19940817
```

```
A hair strengthening relaxing compn.
AΒ
    comprising a cationic polyquaternary polymer that is the product of a
    condensation reaction of a lower dialkylamine (C2-3), a difunctional epoxy
    compd. and a third reactant selected-from the group consisting of ammonia,---
    primary amines, alkylene diamines having two to six carbon atoms, and
    polyamines; and a high-alky. hair relaxing agent. A
    hair relaxer contained propylene glycol 2.00, 50% sodium
    hydroxide 4.50, PEG-50 lanolin 0.49, Betz polymer 1195 2.00, petrolatum
     12.00, mineral oil 17.00, emulsifier 10.00, Laneth-15 0.98, and water
    53.03%.
ST
    hair strengthening compn cationic polyquaternary
    polymer
IT
    Amines, biological studies
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (diamines, reaction products with dialkylamines and epoxy compds.;
        hair strengthening compn. contg. cationic
        polyquaternary polymers)
IT
    Alkali metal hydroxides
    Alkaline earth hydroxides
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair strengthening compn. contg. cationic
        polyquaternary polymers)
ΙT
    Quaternary ammonium compounds, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydroxides; hair strengthening compn.
        contg. cationic polyquaternary polymers)
IT
    Amines, biological studies
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (polyamines, nonpolymeric, reaction products with dialkylamines and
        epoxy compds.; hair strengthening compn. contg.
        cationic polyquaternary polymers)
TT
    Quaternary ammonium compounds, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; hair strengthening compn. contg.
        cationic polyquaternary polymers)
    Amines, biological studies
ΤТ
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (primary, reaction products with dialkylamines and epoxy compds.;
        hair strengthening compn. contg. cationic
       polyquaternary polymers)
TT
    Hair preparations
        (straighteners; hair strengthening compn. contg.
        cationic polyquaternary polymers)
    7664-41-7D, Ammonia, reaction products with dialkylamines and epoxy
ΙT
    compds., biological studies
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hair strengthening compn. contg. cationic
        polyquaternary polymers)
    113-00-8, Guanidine 1305-62-0, Calcium hydroxide, biological
ΙT
    studies 1310-73-2, Sodium hydroxide, biological studies
                                                                 26062-79-3,
                   42751-79-1
    Merquat 100
                               64120-25-8, Guanidine hydroxide
                                                                  68039-13-4,
                  86752-73-0, Betz 1195 100224-74-6, Guanidine carbonate
    Polycare 133
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair strengthening compn. contg. cationic
        polyquaternary polymers)
```

1305-62-0, Calcium hydroxide, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair strengthening compn. contg. cationic polyquaternary polymers)

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

HO-Ca-OH

L30 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:155151 HCAPLUS

DN 126:162344

TI Antibacterial/bactericidal/antiseptic agent, dermatologic preparation, and detergent composition

IN Saito, Yoshinobu; Kishi, Nobuyuki; Kita, Katsuhito; Hirano, Natsue; Nishina, Tetsuo

PA P and Pf Co., Ltd., Japan; Saito, Yoshinobu; Kishi, Nobuyuki; Kita, Katsuhito; Hirano, Natsue; Nishina, Tetsuo

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-12

ICS A61K031-28; A61L002-16; A01N031-06

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.				KIND		DATE			APPLICATION NO.).	DATE				
PΤ	PI WO 9702025 W: CN, JP,			Δ.	A1 19970123			WO 1996-JP920					19960401						
					•	155.0125			2550 01520					23300102					
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
	EΡ	P 835655		A.	A1 19980415		EP 1996-907767			7	19960401								
		R:	DE,	FR,	GB,	ΙT													
	CN	1189	099		Α		1998	0729		CN	19	96-1	95108	3	1996	0401			
	US	6025	312		Α		2000	0215		US	19	97-8	94020)	1997	0723			
PRAI	JΡ	1995	-188	545			1995	0630											
	JΡ	1995	-344	461			1995	1204											
	WO	1996	-JP92	20			1996	0401											
PRAI	US JP JP	1189 6025 1995 1995	099 312 -188! -344	545 461	A A		2000 1995 1995	0215 0630 1204											

AB An antibacterial/bactericidal/antiseptic agent, a dermatol. prepn. and a detergent compn. each contains, an aluminum salt of hinokitiol or/and a complex compd. of hinokitiol with an aluminum compd. as the active ingredient. The use of hinokitiol in the form of the above salt or complex serves to dispel the thermal, optical and chem. instabilities inherent in hinokitiol and to stabilize hinokitiol prepns. during the prodn. and storage thereof.

ST hinokitiol aluminum bactericide cosmetic; dermatol prepn hinokitiol aluminum; detergent hinokitiol aluminum

IT Antibacterial agents

Bath preparations

Detergents

(antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contg. hinokitiol aluminum salts or complexes)

IT Shampoos

(body; antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contg. hinokitiol aluminum salts or

```
KOSS
        complexes)
     Cosmetics
ΙT
```

(skin; antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contg. hinokitiol aluminum salts or complexes)

Hair conditioners IT

(tonics; antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contg. hinokitiol aluminum salts or

ΙT 499-44-5D, Hinokitiol, aluminum salts or complexes 1344-28-1D, Aluminum oxide (Al2O3), hinokitiol complexes 21645-51-2D , Aluminum hydroxide, hinokitiol complexes 186905-95-3 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) (antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contq. hinokitiol aluminum salts or

complexes)

ΙT 21645-51-2D, Aluminum hydroxide, hinokitiol complexes RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibacterial/bactericidal/antiseptic agent, dermatol. prepn., and detergent compn. contg. hinokitiol aluminum salts or complexes)

21645-51-2 HCAPLUS RN

CN Aluminum hydroxide (Al(OH)3) (9CI) (CA INDEX NAME)

OH HO-Al-OH

ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2002 ACS L30 AN 1996:544080 HCAPLUS DN 125:176979 TΙ Novel hair relaxer compositions based on lithium salts ΙN Cowsar, Donald R. Carsons Products Company, USA PASO PCT Int. Appl., 44 pp. CODEN: PIXXD2 DT Patent LA English IC ICM A61K007-09 62-3 (Essential Oils and Cosmetics) Section cross-reference(s): 78 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. ______ ____ -----_____ WO 1996-US18 PΙ WO 9621418 A1 19960718 19960111 W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, -MR, -----NE, SN 19970311 US 1995-373940 US 5609859 19950113 CA 2210198 AΑ 19960718 CA 1996-2210198 19960111

```
KOSS
        09/931914
                                      Page 51
                           19960731
                                             AU 1996-46506
     AU 9646506
                       A1
                                                               19960111
                                                               19960111
     ZA 9600214
                        A 19970711
                                             ZA 1996-214
                       Α
                            19971111
     BR 9607180
                                             BR 1996-7180
                                                              19960111
     EP 809481
                      Α1
                             19971203
                                             EP 1996-902048
                                                               19960111
         R: BE, FR, GB, NL
     US 5849277 A
                             19981215
                                             US 1996-698969
                                                               19960816
                       Α
PRAI US 1995-373940
                             19950113
                      W
                             19960111
     WO 1996-US18
     Methods for prepg. hair relaxer compns.
AB
     comprise a lithium salt and an alk. earth hydroxide, wherein the lithium
     salt is in molar excess to the alk. earth hydroxide. Compns.,
     kits contg. the compns., and methods for using the
     compns. are also disclosed.
     lithium salt hydroxide hair relaxer
ST
IT.
     Alkaline earth hydroxides
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); USES (Uses)
        (hair relaxer compns. based on lithium
        salts)
IT
     Hair preparations
        (relaxers, hair relaxer compns.
        based on lithium salts)
     497-19-8, Sodium carbonate, biological studies 554-13-2, Lithium
TT
     carbonate 584-08-7, Potassium carbonate 1305-62-0, Calcium
     hydroxide, biological studies 1305-78-8, Calcium oxide, biological studies 1310-58-3, Potassium hydroxide, biological studies 1310-65-2, Lithium hydroxide 7439-93-2D, Lithium, salts 10377-48-7, Lithium
     sulfate 10377-52-3, Lithium phosphate 17194-00-2, Barium
     hydroxide 18480-07-4, Strontium hydroxide
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); USES (Uses)
        (hair relaxer compns. based on lithium
        salts)
ΙT
     1305-62-0, Calcium hydroxide, biological studies
     17194-00-2, Barium hydroxide 18480-07-4, Strontium
     hydroxide
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); USES (Uses)
        (hair relaxer compns. based on lithium
        salts)
     1305-62-0 HCAPLUS
RN
     Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
CN
но-са-он
     17194-00-2 HCAPLUS
RN
     Barium hydroxide (Ba(OH)2) (9CI) (CA INDEX NAME)
CN
но-ва-он
RN
     18480-07-4 HCAPLUS
     Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)
CN
```

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

HO-Sr-OH

```
ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2002 ACS
T.30
ΑN
     1996:71445 HCAPLUS
     124:155649
DN
ΤI
     Conditioning and straightening hair relaxer
     Patel, Manilal M.
TN
PΑ
     Luster Products, Inc., USA
SO
     U.S., 5 pp. Cont. of U.S. Ser.No. 210,133, abandoned.
     CODEN: USXXAM
DT
     Patent
LA
     English
     ICM A61K007-09
TC
         A61K007-07
     ICS
NCL
     424070200
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
     US 5476650
                             19951219
PΙ
                       Α
                                            US 1995-402301
                                                              19950309
PRAI US 1994-210133
                             19940317
    A hair relaxing compn. used in high alk.
     conditions comprising at least one active hair relaxer
     ingredient, moisturizers, emollients, and emulsifier, with
     polymethacrylamidopropyltrimonium chloride included in the formula. A
    hair relaxing system was prepd. contg. cetearyl alc. and Ceteareth 20 10.00, cetyl alc. 1.00, PEG-75 lanolin 0.50, mineral oil
     24.00, petrolatum 10.00, DEA oleth-10 phosphate 0.50, water 44.45,
     propylene glycol 3.0, LiOH.cntdot.H2O 2.75, Ca(OH)2 1.80, and
     polymethacrylamidopropyltrimonium chloride 2.00 wt.%, resp.
ST
     polymethacrylamidopropyltrimonium chloride hair straightening
     conditioner; hair relaxer conditioning straightening
     polymethacrylamidopropyltrimonium-chloride
ΙT
    Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cetearyl; conditioning and straightening hair
        relaxer compns. contq. polymethacrylamidopropyltrimon
        ium chloride)
ΙT
     Paraffin oils
     Petrolatum
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (conditioning and straightening hair relaxer
        compns. contg. polymethacrylamidopropyltrimonium chloride)
     Alcohols, biological studies
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C16-18, ethoxylated, conditioning and straightening hair
        relaxer compns. contq. polymethacrylamidopropyltrimon
        ium chloride)
IT
    Hair preparations
        (conditioners, straighteners, conditioning and straightening
        hair relaxer compns. contg.
        polymethacrylamidopropyltrimonium chloride)
ΙT
    Lanolin
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (ethoxylated, conditioning and straightening hair
        relaxer compns. contg. polymethacrylamidopropyltrimon
```

```
KOSS
         09/931914
```

ium chloride)

ΙT Hair preparations

(relaxers, conditioning and straightening hair relaxer compns. contg. polymethacrylamidopropyltrimon ium chloride)

ΙT 57-55-6, Propylene glycol, biological studies 1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, biological studies 36653-82-4, Cetyl alcohol 68039-13-4 173447-16-0 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(conditioning and straightening hair relaxer

compns. contg. polymethacrylamidopropyltrimonium chloride)

1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies IT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(conditioning and straightening hair relaxer

compns. contg. polymethacrylamidopropyltrimonium chloride)
1305-62-0 HCAPLUS

RN

Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME) CN

HO-Ca-OH

```
L30
    ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2002 ACS
```

ΑN 1995:756259 HCAPLUS

DN 123:142668

TI Cation-complexed polysaccharides

ΙN Barnum, Paquita E.; Majewicz, Thomas G.

PΑ

Hercules Inc., USA Can. Pat. Appl., 57 pp. SO

CODEN: CPXXEB

DTPatent

English LA

IC ICM C08B037-00

ICS C08B011-12; C08B031-12; A61K031-715; A23L001-308

CC 18-7 (Animal Nutrition)

Section cross-reference(s): 17, 33, 63

FAN.CNT 1

2	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2128160	AA	19950117	CA 1994-2128160	19940715
	FI 9403296	Α	19950117	FI 1994-3296	19940711
	NO 9402620	A	19950117	NO 1994-2620	19940712
	HU 75240	A2	19970528	HU 1994-2102	19940714
	CZ 288879	В6	20010912	CZ 1994-1702	19940714
	AU 9467502	A1	19950127	AU 1994-67502	19940715
	AU 675542	B2	19970206		
	JP 07090002	A2	19950404	JP 1994-163665	19940715
	EP 648495	A2	19950419	EP 1994-111053	19940715
	EP 648495	B1	20000105		
	R: AT, BE,	CH, DE	, DK, ES, FR, G	GB, IT, LI, NL, PT	, SE
	AT 188380	E	20000115	AT 1994-111053	19940715
	ES 2140482	Т3	20000301	ES 1994-111053	19940715
	CN 1104890	Α	19950712	CN 1994-116163	19940716
	BR 9402851	A	19950613	BR 1994-2851	19940718
PRAI	US 1993-93231	A	19930716		
AB	An ingestible co	ompn. c	omprises at lis	st one water-insol	., cation-

ST

ΙT

IT

ΙT

ΙT

ΙT

IT

ΙT

TΤ

```
complexed anionic polysaccharide dispersed in an aq. medium.
compn. has a low viscosity and is heat sterilizable. The
polysaccharide of the present invention cause no or minor increase of
viscosity of liqs. contg. proteins, peptides or amino acids. The
compns. are useful as an antidiarrheal, a nutritional means of
improving gastrointestinal function including bowel function and
increasing absorption of org. and inorg. nutrients and water. A
water-insol., cation-complexed anionic polysaccharide is prepd.
by wetting a starting anionic-polysaccharide with water to a total solids
content of about 30-70%, adding a cation and then milling. A low
viscosity, feeding compn. provides an individual's requirements
for carbohydrates, proteins, lipids, vitamins, minerals and at least one
substantially water-insol., cation-complexed anionic
polysaccharide in an aq. medium. This same compn. may be prepd.
in a dehydrated state and then subsequently rehydrated when ready for use.
anionic polysaccharide cation complex antidiarrheal feeding
Cations
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (complexes with anionic polysaccharides; ingestible liq.
   compns. contg. water-insol. cation-complexed anionic
   polysaccharides)
Digestive tract
   (ingestible liq. compns. contg. water-insol. cation-
   complexed anionic polysaccharides)
Amino acids, biological studies
Beverages
Dietary fiber
Fatty acids, biological studies
Flaxseed
Mineral elements
Okra
Peptides, biological studies
Proteins, biological studies
Vitamins
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (ingestible liq. compns. contg. water-insol. cation-
   complexed anionic polysaccharides)
Diarrhea
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (inhibitors; ingestible liq. compns. contg. water-insol.
   cation-complexed anionic polysaccharides)
Polysaccharides, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (acidic, complexes; ingestible liq. compns. contg.
   water-insol. cation-complexed anionic polysaccharides)
Polysaccharides, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (carboxylates, complexes; ingestible liq. compns.
   contg. water-insol. cation-complexed anionic polysaccharides)
Polysaccharides, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
   (complexes, with cations; ingestible liq. compns.
   contq. water-insol. cation-complexed anionic polysaccharides)
                         Nutrients
```

```
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (enteral, ingestible liq. compns. contg. water-insol. cation-
        complexed anionic polysaccharides)
     Pharmaceutical dosage forms
IT
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (enteric, ingestible liq. compns. contg. water-insol. cation-
        complexed anionic polysaccharides)
IT
     Polysaccharides, biological studies
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (phosphates, complexes; ingestible liq. compns.
        contg. water-insol. cation-complexed anionic polysaccharides)
IT
    Alkali metal compounds
    Alkaline earth compounds
    Transition metal compounds
    RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (salts, complexes; ingestible liq. compns. contg.
        water-insol. cation-complexed anionic polysaccharides)
IT
     Polysaccharides, biological studies
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (sulfates, complexes; ingestible liq. compns.
        contg. water-insol. cation-complexed anionic polysaccharides)
     299-28-5D, Calcium gluconate, complexes with anionic
    polysaccharides 1305-62-0D, Calcium hydroxide, complexes
    with anionic polysaccharides
                                   4075-81-4D, Calcium propionate,
                                              5743-27-1D, Calcium
ccharides 7429-90-5D,
    complexes with anionic polysaccharides
    ascorbate, complexes with anionic polysaccharides
    Aluminum, complexes with anionic polysaccharides
                                                        7439-89-6D,
    Iron, complexes with anionic polysaccharides
                                                    7439-95-4D,
    Magnesium, complexes with anionic polysaccharides
                                                          7439-96-5D,
    Manganese, complexes with anionic polysaccharides
                                                          7440-09-7D,
    Potassium, complexes with anionic polysaccharides
                                                          7440-23-5D,
    Sodium, complexes with anionic polysaccharides
                                                      7440-50-8D,
    Copper, complexes with anionic polysaccharides
                                                      7440-66-6D,
                                                    7440-70-2D,
    Zinc, complexes with anionic polysaccharides
    Calcium, complexes with anionic polysaccharides
    Magnesium sulfate, complexes with anionic polysaccharides
    7646-85-7D, Zinc chloride, complexes with anionic
                       7693-13-2D, Calcium citrate, complexes with
    polysaccharides
                               7758-94-3D, Ferrous chloride, complexes
    anionic polysaccharides
    with anionic polysaccharides
                                    7778-18-9D, Calcium sulfate,
    complexes with anionic polysaccharides
                                              8063-16-9D, Psyllium,
                              9000-01-5D, Arabic gum, complexes
    complexes with cations
                    9000-28-6D, Ghatti-gum, complexes with cations-
    with cations
    9000-36-6D, Karaya gum, complexes with cations
                                                      9000-65-1D,
    Tragacanth, complexes with cations 9000-69-5D, Pectin,
                              9004-32-4D, complexes with
    complexes with cations
               9004-61-9D, Hyaluronic acid, complexes with cations
    cations
    9005-25-8D, Starch, phosphated, complexes with cations
    9005-38-3D, Sodium alginate, complexes with cations
    9005-49-6D, Heparin, complexes with cations
                                                  9007-28-7D,
    Chondroitin sulfate, complexes with cations
                                                   9012-72-0D,
    Glucan, phosphated, complexes with cations
                                                  9032-43-3D,
                                                 9050-30-0D, Heparan
    Cellulose sulfate, complexes with cations
    sulfate, complexes with cations
                                       9056-36-4D, Keratan
    sulfate, complexes with cations
                                       9057-06-1D, CM-starch,
```

complexes with anionic polysaccharides 10103-46-5D, Calcium

Xanthan, complexes with cations 24967-94-0D, Dermatan sulfate,

phosphate, complexes with anionic polysaccharides

.kappa.-Carrageenan, complexes with cations

10043-52-4D, Calcium chloride,

28633-45-6D, Ferric citrate,

11114-20-8D,

11138-66-2D,

complexes with cations

complexes with cations

```
complexes with anionic polysaccharides
                                                  51198-15-3D, CM-quar,
     complexes with cations 69992-87-6D, Keratan,
     complexes with cations
                                71010-52-1D, Gellan gum,
     complexes with cations
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
         (ingestible liq. compns. contg. water-insol. cation-
        complexed anionic polysaccharides)
IT
     1305-62-0D, Calcium hydroxide, complexes with anionic
     polysaccharides
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
         (ingestible lig. compns. contg. water-insol. cation-
        complexed anionic polysaccharides)
RN
     1305-62-0 HCAPLUS
CN
     Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
HO- Са- ОН
     ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
     1995:452277 HCAPLUS
ΑN
     122:196539
DN
TI
     Hair relaxer compositions containing strong
     base and alkaline earth metal hydroxides
     Cowsar, Donald R.; Adair, Tony R.
ΙN
PA
     Aminco, Inc., USA
SO
     PCT Int. Appl., 89 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61K007-09
IC
     ICS A61K007-08
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
                       KIND DATE
                                              APPLICATION NO.
                                                                 DATE
     PATENT NO.
                              -----
PΙ
     WO 9503031
                       A1
                              19950202
                                              WO 1994-US7813
                                                                19940719
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,
         GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,
              NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     US 5565216
                         Α
                              19961015
                                               US 1993-93956
                                                                 19930721
                                                                 19940713
     ZA 9405081
                              19950123
                                               ZA 1994-5081
                         Α
     CA 2144971
                              19950202
                                               CA 1994-2144971
                                                                 19940719
                         AA
                                               AU 1994-72206
     AU 9472206
                         A1
                              19950220
                                                                 19940719
```

Α1

В1

Α

Т3

R: BE, DE, ES, FR, GB, IT, NL, SE

19950705

20001025

19990908

20010401

EP 1994-921504

BR 1994-5526

ES 1994-921504

19940719

19940719

19940719

EP 660699

EP 660699

BR 9405526

ES 2154296

```
KOSS
        09/931914
                                    Page -57
PRAI US 1993-93956
                       Α
                            19930721
    WO 1994-US7813
                       W
                            19940719
    A two-component hair relaxer system comprises (a) a
AB
     first component comprising a cream base contg. a water-sol. salt of a
     relatively strong base with an anion capable of being pptd. by an alk.
     earth metal ion under highly alk. conditions, and (b) a second, sep.
     component, which is substantially free of water, and contg. an alk.
    material having an alk. earth metal ion which forms a ppt. with the anion
    when the first component and second component are mixed. A hair
     relaxer system contained Cosmowax J 12.00, petrolatum 10.00, light
    mineral oil 10.00, Generol 122E-5 (PEG-5 soya sterol) 1.00, water 54.7985,
     Fluilan AWS 3.00, guanidine carbonate 7.40, succinic acid 0.3, thiazole
    yellow G 0.0015, Crodafos SG 1.50, in the first component which was a
     cream base having pH = 10.1 and propylene glycol 51.0, silica 4.0, Ca(OH)2
     37.0, CaO 6.0, TiO2 2.0 in the second component which was an activator
    lotion.
ST
    hair relaxer alk earth metal hydroxide; base
    hair relaxer; calcium hydroxide quanidine carbonate
    hair relaxer
IT
    Alkaline earth hydroxides
    Alkaline earth oxides
    Amidines
    Carboxylic acids, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES_
        (hair relaxer compns. contg. strong base
        and alk. earth metal hydroxides)
    Acids, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (heterocyclic; hair relaxer compns.
        contg. strong base and alk. earth metal hydroxides)
    Bases, biological studies
IΤ
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (strong; hair relaxer compns. contg.
        strong base and alk. earth metal hydroxides)
    Carboxylic acids, biological studies
ΙT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (aliph., hair relaxer compns. contg.
        strong base and alk. earth metal hydroxides)
    Carboxylic acids, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (aliph., cyclic, hair relaxer compns.
        contg. strong base and alk. earth metal hydroxides)
    Carboxylic acids, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (aryl, hair relaxer compns. contg. strong
        base and alk. earth metal hydroxides)
    Carboxylic acids, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

(relaxers, hair relaxer compns.

Hair preparations

ΙΤ

(di-, hair relaxer compns. contg. strong base and alk. earth metal hydroxides)

contg. strong base and alk. earth metal hydroxides)

biological studies

biological studies

KOSS

TΥ

biological studies 107-41-5, Hexylene glycol 110-15-6, Succinic acid,

57-55-6, 1,2-Propanediol, biological studies 60-35-5, Acetamide,

113-00-8, Guanidine 144-62-7, Oxalic acid, biological studies 471-29-4, n-Methyl guanidine 1305-62-0, Calcium hydroxide,

biological studies 1305-78-8, Calcium oxide, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES_

56-86-0, L-Glutamic acid, biological studies

110-16-7, 2-Butenedioic acid (Z)-, biological studies

56-81-5, 1,2,3-Propanetriol,

44592-85-0

7664-93-9, Sulfuric acid,

50-21-5, Lactic acid, biological studies

7664-38-2, Phosphoric acid, biological studies

100224-74-6, Guanidine carbonate

biological studies 25265-75-2, Butylene glycol

```
WO 1993-US737
                            19930127
    US 1993-115901
                            19930901
    US 1995-378897
                            19950126
AB
    process involves the topical application of, liq., solid, granular, or
    gel-like materials (e.g. cosmetics) to a cell culture and then evaluating
    the cytotoxicity of the material. Cell cultures of human skin without a
    stratum corneum and having a histol. similarity to the eyes are used.
```

(Uses) (hair relaxer compns. contg. strong base and alk. earth metal hydroxides) 1305-62-0, Calcium hydroxide, biological studies TΤ RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair relaxer compns. contg. strong base and alk. earth metal hydroxides) RN 1305-62-0 HCAPLUS CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME) но-са-он ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2002 ACS L30 ΑN 1993:575751 HCAPLUS DN 119:175751 TΙ in vitro model for eye and skin irritation testing ΙN Osborne, Rosemarie; Perkins, Mary Ann; Roberts, Deirdre Anne PΑ Procter and Gamble Co., USA SO PCT Int. Appl., 22 pp. CODEN: PIXXD2 DΤ Patent English LA ICM G01N033-50 IC 4-1 (Toxicology) Section cross-reference(s): 62 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ______ ____ _____ -----PΙ WO 9317336 A1 19930902 WO 1993-US737 19930127 W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG AU 9335956 19930913 AU 1993-35956 A1 19930127 US 1997-877963 US 6020148 Α 20000201 19970618 PRAI US 1992-838594 19920219 A technique is disclosed for testing of ocular and dermal irritants. The

```
Irritation is evaluated by measuring cell viability using an MTT assay
     (based on the redn. of a tetrazolium dye by functional mitochondria) or by
     testing for release of LDH or PGE2. A unique method of applying
     test materials which are not water-sol. is also described. The methodol.
     of the invention was applied to strong (e.g. NaOH, dish detergent), mild
     to moderate (e.g. laundry detergent, skin care cream), and innocuous to
     slight (e.g. liq. fabric softener, toothpaste) irritant test materials.
ST
     irritant eye skin bioassay; cosmetic irritant bioassay
TΤ
     Irritants
        (bioassay for, of skin or eye)
     Textiles
IT
        (cleaning and care products for, irritancy of, for skin or eye,
        bioassay for evaluation of)
ΙT
     Coloring materials
        (cosmetic, irritancy of, for skin or eye, bioassay for evaluation of)
     Bioassay
IT
        (for skin or eye irritant)
IT
     Softening agents
        (for textiles, irritancy of liq., for skin or eye, bioassay for
        evaluation of)
     Animal tissue culture
ŢΤ
        (in irritant of skin or eye evaluation)
     Cosmetics
IT
     Cream
     Dentifrices
     Emulsions
     Pastes
     Powders
     Sunscreens
     Surfactants
        (irritancy of, for skin or eye, bioassay for evaluation of)
     Eye, toxic chemical and physical damage
     Skin, toxic chemical and physical damage
        (irritant of, bioassay for)
IT
     Gels
        (products like, irritancy of, for skin or eye, bioassay for evaluation
        of)
ΙT
     Fibroblast
        (without stratum corneum, in bioassay for irritant evaluation)
ΙT
        (cleaning compns., irritancy of, for skin or eye, bioassay
        for evaluation of)
IT
     Cosmetics
        (cleansing, irritancy of, for skin or eye, bioassay for evaluation of)
TT
     Perfumes
        (colognes, irritancy of, for skin or eye, bioassay for evaluation of)
IT
     Dyes
        (cosmetic, irritancy of, for skin or eye, bioassay for evaluation of)
IT
     Cosmetics
        (creams, irritancy of, for skin or eye, bioassay for evaluation of)
IT
     Detergents
        (dishwashing, irritancy of, for skin or eye, bioassay for evaluation
        of)
ΙT
     Hair preparations
        (dyes, irritancy of, for skin or eye, bioassay for evaluation of)
IT
        (keratinocyte, without stratum corneum, in bioassay for
        irritant evaluation)
IT
     Detergents
        (laundry, irritancy of, for skin or eye, bioassay for evaluation of)
```

ΙT Cosmetics

(moisturizers, irritancy of, for skin or eye, bioassay for evaluation

ΙT **Hair** preparations

(straighteners, irritancy of, for skin or eye, bioassay for evaluation

ΙT

KOSS

(stratum corneum, keratinocyte or fibroblast without, in bioassay for irritant evaluation)

ΙT Sunburn and Suntan

> (suntanning agents, irritancy of, for skin or eye, bioassay for evaluation of)

Hair preparations TT

(wave-setting, irritancy of, for skin or eye, broassay for evaluation of)

ΙT 298-93-1, MTT

RL: ANST (Analytical study)

(cell viability detn. with, in evaluation of irritants of skin or eye)

1305-62-0, Calcium hydroxide, biological studies IT 1310-73-2,

Sodium hydroxide, biological studies

RL: BIOL (Biological study)

(irritancy of, for skin or eye, bioassay for evaluation of)

9001-60-9, Lactate dehydrogenase ΙT 363-24-6, PGE2

RL: PROC (Process)

(release of, from cultured cell, in evaluation of irritants of skin or eye)

ΙT 1305-62-0, Calcium hydroxide, biological studies

RL: BIOL (Biological study)

(irritancy of, for skin or eye, bioassay for evaluation of)

1305-62-0 HCAPLUS RN

Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME) CN

но-са-он

ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2002 ACS L30

1992:158564 HCAPLUS AN

116:158564 DN

Hair dyeing composition containing TΙ 5,6-dihydroxyindoline derivatives

Lagrange, Alain; Luppi, Bernadette; Junino, Alex IN

PΑ Oreal S. A., Fr.

Eur. Pat. Appl., 18 pp. SO

CODEN: EPXXDW

DT Patent

LA French

ICM A61K007-13 IC ICS C07D209-08; D06P001-32; D06P003-08; D06P003-30

62-3 (Essential Oils and Cosmetics) CC

Section cross-reference(s): 27

DAM CHIE 1

t WIM.	CMIT						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	EP 462857	A1	19911227	EP 1991-401399	19910530		
	EP 462857	B1	19940817				
	EP 462857	B2	19980304				
	R· AT. BE.	CH. DE	. DK. ES. FR.	GB. GR. IT. LI. NL	. SE		

HO.
$$\begin{array}{c|c} \text{CH}_2 \\ \text{CH}_2 \\ \text{HO} \\ \text{N} \\ \text{R} \end{array} \quad \text{I}$$

AB A hair dye compn. contains 5,6-dihydroxyindoline (I; R

= H, C1-4 alkyl) and acid addn. salts therefrom. Bromohydric acid was
reacted with 5,6-dimethoxyindoline followed by hydrolysis to obtain
5,6-dihydroxyinoline hydrobromide (II). A hair dye contg. II
2.0, EtOH 15.0, KI 1.0, preservatives q.s. and water 100.0 g was applied
on 90% gray hair for 15 min followed by washing and application
of a soln. contg. H2O2 at pH = 3 to get a dark brown color.

ST hair dye prepn indoline deriv

IT Named reagents and solutions

RL: BIOL (Biological study)

(Fenton's, hair dye compn. contg. dihydroxyindoline deriv. and)

IT Hair preparations

(dyes, dihydroxyindoline derivs. in)

IT Rare earth metals, compounds

RL: BIOL (Biological study)

(salts, hair dye compn. contg. dihydroxyindoline

deriv. and)

IT 26602-89-1, Bromobutane

RL: RCT (Reactant)

(butylation by, of dimethoxyindole deriv.)

IT 15937-13-0 29539-03-5, 5,6-Dihydroxyindoline 138937-28-7 139721-20-3

139721-21-4 139721-22-5

RL: BIOL (Biological study)

(hair dye compn. contq.)

TT 7681-52-9, Sodium hypochlorite 7697-37-2D, Nitric acid, alkali metal and alk. earth metal salts 7722-84-1, Hydrogen peroxide (H2O2), miscellaneous 10294-54-9, Cesium sulfate 13444-71-8, Periodic acid 13444-71-8D, Periodic acid, salts 13465-41-3, Permanganic acid (HMnO4) 13746-66-2, Potassium ferricyanide 13907-47-6, Bichromate 20667-12-3, Silver oxide

RL: BIOL (Biological study)

(hair dye compn. contg. dihydroxyindoline deriv.

and)

```
ΙT
     106-51-4, 2,5-Cyclohexadiene-1,4-dione, miscellaneous
                                                             106-51-4D,
     2,5-Cyclohexadiene-1,4-dione, imine derivs. 127-52-6, Chloramine B
                              130-15-4, 1,4-Naphthoquinone
     127-65-1, Chloramine T
                                                             130-15-4D,
     1,4-Naphthoquinone, imine derivs. 524-42-5, 1,2-Naphthoquinone
     524-42-5D, 1,2-Naphthoquinone, imine derivs.
                                                    583-63-1,
     3,5-Cyclohexadiene-1,2-dione 583-63-1D, 3,5-Cyclohexadiene-1,2-dione,
     imine derivs.
                     1309-60-0, Lead oxide
                                             7429-91-6, Dysprosium,
    miscellaneous
                     7439-89-6D, Iron, salts 7439-91-0, Lanthanum,
                     7439-96-5, Manganese, miscellaneous
    miscellaneous
                                                           7440-22-4D, Silver,
             7440-45-1D, Cerium, salts
                                         7440-48-4D, Cobalt, salts
     7440-50-8D, Copper, salts 7440-53-1, Europium, miscellaneous
     7440-54-2, Gadolinium, miscellaneous 7440-64-4, Ytterbium, miscellaneous
     7783-20-2, Ammonium sulfate, miscellaneous
     RL: MSC (Miscellaneous)
        (hair dye compn. contg. dihydroxyindoline deriv.
        and)
                                                  7758-99-8, Copper sulfate
IT
     7681-11-0, Potassium iodide, miscellaneous
                  7790-28-5, Sodium metaperiodate
    pentahydrate
    RL: BIOL (Biological study)
        (hair dye prepn. contg. dihydroxyindoline deriv. and)
IT
     139721-23-6P
    RL: RCT (Reactant); PREP (Preparation)
        (prepn. and hydrolysis of)
ΙT
     139721-24-7P
                   139721-25-8P
    RL: PREP (Preparation)
        (prepn. of, for hair dye prepn.)
ΙT
     15937-07-2, 5,6-Dimethoxyindoline
    RL: RCT (Reactant)
        (reaction of, with bromhydric acid)
     68890-32-4
IT
    RL: RCT (Reactant)
        (reaction of, with bromic acid)
IT
     7789-31-3, Bromic acid
    RL: RCT (Reactant)
        (reaction of, with dimethoxyindoline deriv.)
     13465-41-3, Permanganic acid (HMnO4)
TΤ
    RL: BIOL (Biological study)
        (hair dye compn. contg. dihydroxyindoline deriv.
        and)
RN
     13465-41-3 HCAPLUS
     Permanganic acid (HMnO4) (7CI, 8CI, 9CI) (CA INDEX NAME)
CN
```

```
ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     1990:446095 HCAPLUS
DN
     113:46095
ΤI
     Phase-stable hair relaxer cream
IN
     Akhtar, Muhammad M.; Newell, Florine
     Johnson Products Co., Inc., USA
PA
     PCT Int. Appl., 48 pp.
SO
     CODEN: PIXXD2
DT
     Patent
```

IT

```
LA
    English
     ICM A61K007-09
IC
     ICS A45D007-00
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
     -----
                                            -----
     WO 8909048
                            19891005
                                            WO 1989-US1199
                                                             19890323
PΙ
                       A1
         W: BB, BR
         RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR,
             NL, SE, SN, TD, TG
     CA 1329368
                            19940510
                                            CA 1989-594236
                                                             19890320
                       A1
                                            EP 1989-904433
    EP 362355
                       Α1
                            19900411
                                                             19890323
                            19950510
    EP 362355
                      В1
         R: BE, DE, FR, GB, IT, NL
     BR 8907336
                     A 19910326
                                            BR 1989-7336
                                                             19890323
                      Α
                            19911126
                                            US 1990-486538
     US 5068101
                                                             19900228
    US 5171565
                            19921215
                      Α
                                            US 1991-778570
                                                             19911017
     US 5376364
                      Α
                            19941227
                                            US 1991-785095
                                                             19911030
PRAI US 1988-173318
                            19880325
     WO 1989-US1199
                            19890323
     US 1989-399385
                            19890825
     US 1989-410803
                            19890922
     US 1990-486538
                            19900228
AB.
     The title compn. is a highly alk. and a no-base (or no-lye)
     cream that can be converted for use as a hair relaxer
     by admixing with an aq. activator soln. The compn. contains an
     alk. compd., such as alkali metal hydroxide or alk. earth hydroxide in
    oil-in-water emulsion base. Thus, a oil phase contg. petrolatum 15, white mineral oil 12, polawax 0.25, emulsifying wax 8, and Merquat 100 2 wt.%
     was placed in a mixer, heated to .apprx.80.degree. and mixed for .apprx.30 \,
     min. A water phase contg. deionized water q.s., Ca(OH)2 6.3, Mirano P DM
     0.37, and propylene glycol 5 wt.% (preheated at .apprx.80.degree. for
     .apprx.15 min) was then added slowly to the oil phase while maintaining at
     .apprx.80.degree.. The resulting emulsion was stirred for 30\text{-}45 min and
     cooled to 55-45.degree., at which point perfume was added. The emulsion
     was again mixed for .apprx.15 min and cooled to give a smooth cream.
    hair relaxer cream calcium hydroxide
ST
ΙT
     Thickening agents
     Paraffin oils
     Petrolatum
     RL: BIOL (Biological study)
        (hair relaxer cream contg. alkali metal hydroxide
        and, phase-stable)
ΙT
     Alkali metal hydroxides
     RL: BIOL (Biological study)
        (hair relaxer cream contg., phase-stable)
IT
     Lanolin
     RL: BIOL (Biological study)
        (ethoxylated, hair relaxer cream contg. alkali
        metal hydroxide and, phase-stable)
ΙT
     Fatty acids, esters
     RL: BIOL (Biological study)
        (ethoxylated, esters, hair relaxer cream contg.
        alkali metal hydroxide and, phase-stable)
     Alcohols, biological studies
IT
     RL: BIOL (Biological study)
        (fatty, hair relaxer cream contg. alkali metal
        hydroxide and, phase-stable)
```

Alcohols, biological studies

RL: BIOL (Biological study)

(polyhydric, hair relaxer cream contg. alkali metal hydroxide and, phase-stable)

IT Hair preparations

KOSS

(relaxers, alkali compds. and surfactants and conditioners in)

TT 50-70-4, Sorbitol, biological studies 50-70-4D, Sorbitol, fatty acid esters 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 107-41-5, Hexylene glycol 9003-11-6 25265-75-2, Butylene glycol 27299-12-3 28301-34-0D, salts 28603-06-7 30473-39-3 76689-43-5, Bentone Gel MIO

RL: BIOL (Biological study)

(hair relaxer cream contg. alkali metal hydroxide
and, phase-stable)

IT 1305-62-0, Calcium hydroxide, biological studies 100224-74-6, Guanidine carbonate

RL: BIOL (Biological study)

(hair relaxer cream contg., phase-stable)

IT 1305-62-0, Calcium hydroxide, biological studies

RL: BIOL (Biological study)

(hair relaxer cream contg., phase-stable)

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

но-са-он

L30 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2002 ACS

AN 1982:187101 HCAPLUS

DN 96:187101

TI Guanidine hydroxide composition for waving hair

IN De la Guardia, Mario J.

PA Carson Products Co., USA

SO Can., 51 pp. Division of Can. Appl. No. 318,443. CODEN: CAXXA4

DT Patent

LA English

IC A61K007-09

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 2

ran.	PATENT NO.	KIND	DATE	APPLICATIONNO.	DATE				
PI	CA 1117423	A2	19820202	CA 1981-372184	19810303 19781115				
	BR 7808756 CA 1106288	A A1	19810630 19810804	BR 1978-8756 CA 1978-318443	19781221				
PRAI	CA 1978-318443 US 1977-805149		19781221 19770609						
	WO 1978-US157		19781115						

AB Human hair straightening or relaxing compns

., which exhibit improved hair strength retention and significantly decreased scalp irritation consist of guanidine hydroxide (I) [64120-25-8] (1.25-50% by wt.) as the principal active ingredient. These compns. exhibit permanent relaxation which lasts until new hair growth requires the repetition of treatment. I is freshly prepd. from a mixt. contg. at least 1 water-sol. hydroxide such

as Ca(OH) 2 or Ba(OH) 2 and 1 water-sol. guanidine salt, the anion of which forms a substantially water-insol. salt with the cation of the hydroxide in an aq. medium. A hair relaxer 2-component system

ST

ΙT

IT

ΙT

IT

TΤ

RN

CN

```
09/931914
                               Page 65
was formulated with 1 component being in the form of a cream emulsion
contg. cetomacrogol wax 10, cetyl alc. 2.5, mineral oil 20, propylene
glycol 5, Ca(OH)2 7.2% and H2O to 100%. This cream was mixed with a 25%
aq. soln. of guanidine carbonate [593-85-1] in a ratio of 75:25 for 2
      The hair of an individual was treated with this
formulation for 20 min and washed with warm water and the hair
neutralized with a neutralizing shampoo (pH 6.5) contg. triethanolamine
lauryl sulfate 15, Na2HPO4 1.15, NaOH 0.093 and preservatives 0.35% (by
wt.) and water to 100%. The hair treated had a permanent
relaxing or straightening effect.
hair straightener guanidine hydroxide; calcium hydroxide
guanidine carbonate hair; strontium hydroxide guanidine
carbonate hair; barium hydroxide guanidine carbonate
hair
Hair preparations
   (straighteners, guanidine hydroxide for)
64120-25-8
RL: BIOL (Biological study)
   (hair straightener compns. contg.)
593-85-1
          594-14-9
RL: BIOL (Biological study)
   (hair straightener compns. contg. alk. earth metal
   hydroxides and)
1305-62-0, biological studies 17194-00-2
18480-07-4
RL: BIOL (Biological study)
   (hair straightener compns. contg. water-sol.
   guanidine salts and)
1305-62-0, biological studies 17194-00-2
18480-07-4
RL: BIOL (Biological study)---
   (hair straightener compns. contg. water-sol.
   quanidine salts and)
1305-62-0 HCAPLUS
Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
```

HO-Ca-OH

RN 17194-00-2 HCAPLUS CN Barium hydroxide (Ba(OH)2) (9CI) (CA INDEX NAME)

но-ва-он

RN 18480-07-4 HCAPLUS CN Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)

HO-Sr-OH

L30 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2002 ACS
AN 1979:598794 HCAPLUS
DN 91:198794
TI Hairdressing composition
IN De la Guardia, Mario

```
KOSS
PΑ
     Carson Products Co., USA
SO
     Fr. Demande, 35 pp.
     CODEN: FRXXBL
```

DT Patent LA French

IC A61K007-09

62-3 (Essential Oils and Cosmetics) CC

FAN.CNT 2

	070 16020 10700530
PI FR 2393572 A1 19790105 FR 1	978-16029 19780530
FR 2393572 B1 19821105	070 20077 10700610
	978-20877 19780519 978-3133 19780601
WO 8001038 A1 19800529 WO 1	978-US157 19781115
W: BR, MG, MW RW: CF, CG, CM, GA, SN, TD, TG	
, , , , , ,	978-8756 19781115
PRAI US 1977-805149 1977-0609	

WO 1978-US157 19781115

ΑB A hair straightening compn. contains guanidine hydroxide [64120-25-8] as the active agent. The guanidine hydroxide is generated in situ by treating a guanidine salt with an alk. earth hydroxide. Thus, a straightening cream was prepd. by mixing 25% aq. guanidine carbonate [593-85-1] into a cream consisting of Cetomacrogol 10, cetyl alc. 2.5, mineral oil 20, propylene glycol 5, Ca(OH)2 7.2, and H2O to 100%. After straightening the hair was washed with an acid shampoo contg. triethanolamine lauryl sulfate 15, NaH2PO4 1.15, NaOH 0.093, preservative 0.035, and H2O to 100%, pH 6.5.

hair straightening guanidine hydroxide ST

IT Hair preparations

(straightening compns., guanidine hydroxide in)

1305-62-0, biological studies ΙT

RL: BIOL (Biological study)

(hair straightening compn. contg. guanidine

carbonate and)

IT 64120-25-8

RL: BIOL (Biological study)

(hair straightening compns. contg.)

593-85-1 594-14-9 TT.

RL: BIOL (Biological study)

(hair straightening compns. contg. alk. earth

hydroxides and)

IT 17194-00-2 18480-07-4

RL: BIOL (Biological study)

(hair straightening compns. contg. guanidine

carbonate and)

ΙT 1305-62-0, biological studies

RL: BIOL (Biological study)

(hair straightening compn. contg. guanidine

carbonate and)

RN 1305-62-0 HCAPLUS

Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

HO-Ca-OH

17194-00-2 18480-07-4

RL: BIOL (Biological study)

(hair straightening compns. contg. guanidine carbonate and)

RN 17194-00-2 HCAPLUS

CN Barium hydroxide (Ba(OH)2) (9CI) (CA INDEX NAME)

но-ва-он

RN 18480-07-4 HCAPLUS

CN Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)

HO-Sr-OH

L30 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2002 ACS

AN 1976:578821 HCAPLUS

DN 85:178821

TI Contribution to the kinetics of **keratin** disulfide bond breaking in alkaline medium

AU Galatik, A.; Blazej, A.

CS Dep. Chem. Technol., Slovak Inst. Technol., Bratislava, Czech.

SO Collect. Czech. Chem. Commun. (1976), 41(8), 2289-95 CODEN: CCCCAK

DT Journal

LA. English

CC 39-3 (Textiles)

The kinetics of the disulfide bond breaking in wool keratin in aq. of NaOH, Ca(OH)2, and Na2S were detd. by the stress relaxation technique in oxygen-free medium, and chem. relaxation times and activation parameters were detd. The reaction in aq. Na2S was of the SN2 type. In aq. hydroxides, the predominating mechanism changed from elimination to SN2 when the alky. was >0.5M and the temp. was greater than the transition temp. of wool keratin.

ST wool **keratin** disulfide bond breaking; kinetics disulfide bond breaking; alkali disulfide bond breaking; mechanism disulfide bond breaking

IT Bond

(breaking of disulfide, of keratin in alkaline medium)

IT Keratins

RL: PRP (Properties).

(disulfide bonds of, breaking of, in alk. medium, kinetics and mechanism of)

IT Disulfide group

(in wool **keratin**, breaking of, in alkali, kinetics and mechanism of)

IT Kinetics, reaction

(of disulfide bond breaking, in keratin in alkaline medium)

IT 1305-62-0 1310-73-2, uses and miscellaneous 1313-82-2

RL: USES (Uses)

(**keratin** disulfide bond breaking in aq., kinetics and mechanism of)

IT 1305-62-0

RL: USES (Uses)

(**keratin** disulfide bond breaking in aq., kinetics and mechanism of)

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

HO-Ca-OH

```
ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2002 ACS
L30
     1970:436613 HCAPLUS
ΑN
     73:36613
DN
     Action of unhairing agents on wool keratin
TI
     Simoncini, Alberto; Del Pezzo, Luigi; Manzo, G.
ΑU
     Sta. Sper. Ind. Pelli Mater. Concianti, Naples, Italy
CS
     Cuoio, Pelli, Mater. Concianti (1969), 45(6), 649-64
SO
     CODEN: CPMAAJ
     Journal
DT
LA
     Italian
CC
     41 (Leather and Related Materials)
     By using ir spectrophotometry, the mechanism of the action of alk. solns.
AΒ
     of Na2S, Me2NH and Ca(OH)2 on wool keratin was studied. With
     amines, the products formed due to the rupture of the S-S bond were
     oxidized to sulfinic acid, which, -on-reacting with-NH2 groups, -formed-
     sulfinamides. With Na2S, the sulfonium ions reacted with the NaS-,
     forming compds. of the RSSNa type (where R is a protein residue). The
     action of lime on keratin for short periods, formed compds. of
     the ester type. In all cases, the formation of lanthionine was
    noticed.
ST
     wool keratin unhairing; keratin wool unhairing;
     unhairing wool jeratin; sodium sulfide wool keratin;
     dimethylamine wool keratin; calcium hydroxide wool
     keratin; lime action wool keratin; sulfinamides
     formation; lanthionine formation
IT
     Spectrophotometry
        (infrared, of wool keratins in hide unhairing)
IT
     Wool
        (lanthionine formation in, in presence of unhairing agents)
IT
     Keratins
     RL: USES (Uses)
        (reactions of wool, with unhairing agents)
TT
     Hides
        (unhairing of sheepskins, reactions of wool keratins in)
     496-98-0P
TΤ
     RL: FORM (Formation, nonpreparative); PREP (Preparation)
        (formation of, wool keratin reaction with unhairing agents in
        relation to)
IT
     1305-62-0
                 1313-82-2
     RL: RCT (Reactant)
        (reaction of, with wool keratins, in hide unhairing)
     124-40-3, reactions
ΙT
     RL: RCT (Reactant)
        (with wool keratins, in hide unhairing)
ΙT
     1305-62-0
     RL: RCT (Reactant)
        (reaction of, with wool keratins, in hide unhairing)
     1305-62-0 HCAPLUS
RN
     Calcium hydroxide (Ca(OH)2) (9CI)
                                        (CA INDEX NAME)
```

- t word between the gradient the total the state of the

=> d 132 all 1-4 hitstr

```
L32 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2002 ACS
```

AN 2000:768952 HCAPLUS

DN 133:339965

TI Formulations and methods for reducing skin irritation

IN Hahn, Gary S.; Thueson, David O.

PA Cosmederm Technologies, USA

SO U.S., 30 pp., Cont.-in-part of U.S. 5,716,625. CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-48

NCL 424401000

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 63

FAN.CNT 4

	PAT	CENT	NO.		KI	ND	DATE			Α	PPLI	CATI	ои ис	ο.	DATE				
										_									
ΡI	US	613	9850		Α		2000	1031		U	S 19	97-8	6099	3	1997	0623			
	US	571	6625		Α		1998	0210		-				-	1994				
	WO 9619184			A.	1	1996	0627		W	0 19	95-U	S169	85	1995	1221				
		W:	AM,	AT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,	FI,	
			GB,	GE,	HU,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LK,	LR,	$L_{i}T_{i}$,.	_LU.,_	_L <u>V</u> ,_	_MD.,	

KOSS 09/931914 Page 70 MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG EP 1136065 Α1 20010926 EP 2001-115074 19951221 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE PRAI US 1994-362100 Α2 19941221 WO 1995-US16985 19951221 W EP 1995-944548 ÄЗ 19951221 AB Compns. and methods are provided for inhibiting skin irritation attributable to chem. irritants or environmental conditions, by the application of an anti-irritant amt. of water-sol. strontium cation. compns. can be antiperspirants, deodorants, sunscreens, insect repellents, depilatories, hair dyes, hair bleaches, mouthwashes, ointments, suppositories, etc. Glycolic acid (6 % in 10 % ethanol-in-water) was used as a skin irritant. Strontium nitrate was coadministered as an anti-irritant to subject panels and was shown to inhibit cumulative irritation by 64-84 % at concns. ranging from 250 nM to 500 nM. ST strontium compd skin irritation prevention ΙT Essential oils RL: ADV (Adverse effect, including-toxicity); THU-(Therapeutic-use); BHOL (Biological study); USES (Uses) (Melaleuca; strontium compds. for reducing skin irritation due to ingredients in compns.) ΙT Shaving preparations (aftershave; strontium compds. for reducing skin irritation due to ingredients in compns.) IΤ **Hair** preparations (antidandruff; strontium compds. for reducing skin irritation due to ingredients in compns.) IT Skin preparations (pharmaceutical) (astringents; strontium compds. for reducing skin irritation due to ingredients in compns.) IT. Dermatitis (atopic; strontium compds. for reducing skin irritation due to ingredients in compns.) Hair preparations TΤ (bleaches; strontium compds. for reducing skin irritation due to ingredients in compns.) ΤТ Ion channel blockers (calcium; strontium compds. for reducing skin irritation due to ingredients in compns.) TΤ Cosmetics (cleansing; strontium compds. for reducing skin irritation due to ingredients in compns.) ΙT Temperature (cold; strontium compds. for reducing skin irritation due to environmental conditions) ΙT Hair preparations (conditioners; strontium compds. for reducing skin irritation due to ingredients in compns.) Eye, disease ΙT (conjunctivitis; strontium compds. for reducing skin irritation due to

ingredients in compns.)

ΙT Cosmetics

> (creams; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙT Cosmetics

```
(depilatories; strontium compds. for reducing skin irritation due to ingredients in compns.)
```

IT Digestive tract

Mucous membrane

Reproductive tract

(disease, irritations; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Bath preparations

(douches; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Skin, disease

(dry; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Hair preparations

(dyes; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Drug delivery systems

(enemas; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Aloe barbadensis

Chamomile

Cola nitida

(exts.; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Tea products

(green, exts.; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Carboxylic acids, biological studies

RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hydroxy; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Acne

(inhibitors; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Eye, disease

Respiratory tract

Skin, disease

(irritation; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Fatty acids, biological studies

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(lanolin, strontium salts; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Natural products, pharmaceutical

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(licorice; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Cosmetics

(lotions; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Drug delivery systems

(lozenges; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Cosmetics

(moisturizers; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Anti-inflammatory agents

KOSS

ΙT

```
(nonsteroidal; strontium compds. for reducing skin irritation due to
   ingredients in compns.)
Drug delivery systems
```

(ointments; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙT Drug delivery systems

(ophthalmic; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙT Carboxylic acids, biological studies

> RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxo; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙT Hair preparations

(permanent wave; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙT Ion channel blockers

> (potassium; strontium compds. for reducing skin irritation due to ingredients in compns.)

ΙΤ

(rhinitis; strontium compds. for reducing skin irritation due to ingredients in compns.)

ITIon channel blockers

> (sodium; strontium compds. for reducing skin irritation due to ingredients in compns.)....

ΙT Hair preparations

(straighteners; strontium compds. for reducing skin irritation due to ingredients in compns.)

ITSolar radiation

Wind

(strontium compds. for reducing skin irritation due to environmental conditions)

ΙT Analgesics

Antibiotics

Antiperspirants

Asthma

Contraceptives

Deodorants

Dermatitis

Detergents

Eczema

Infection

Insect repellents

Mouthwashes

Psoriasis

Shampoos

Shaving preparations

Sunscreens

(strontium compds. for reducing skin irritation due to ingredients in compns.)

Alcohols, biological studies IT

Carboxylic acids, biological studies

Peroxides, biological studies

Retinoids

Soaps

RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Steroids, biological studies RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Caseins, biological studies

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(strontium salts; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Drug delivery systems

(suppositories, vaginal; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Drug delivery systems

(suppositories; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT Drug delivery systems

(topical; strontium compds. for reducing skin irritation due to ingredients in compns.)

IT 50-21-5, Lactic acid, biological studies 57-13-6, Urea, biological 58-08-2, Caffeine, biological studies 64-19-7, Acetic acid, 68-26-8, Retinol 69-72-7, biological studies biological studies 76-03-9, Trichloroacetic acid, biological studies 76-93-7, biological studies 77-92-9, biological studies 79-14-1, biological studies 87-69-4, biological studies 90-64-2, Mandelic acid 90-80-2 94-80-294-36-0, Benzoyl peroxide, biological studies 97-59-6, Allantoin 98-79-3 108-95-2, Phenol, biological studies 116-31-4, Retinal 127-17-3, Pyruvic acid, biological studies 144-62-7, Ethanedioic acid, biological 302-79-4, Tretinoin 404-86-4, Capsaicin. 515-69-5, studies 526-95-4, D-Gluconic acid 617-73-2, .alpha.-Hydroxy .alpha.-Bisabolol octanoic acid 1405-86-3, Glycyrrhizic acid 5393-81-7, .alpha.-Hydroxy 6915-15-7 70424-62-3 126094-21-1 decanoic acid RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (strontium compds. for reducing skin irritation due to ingredients in

compns.)

ΙT 526-26-1, Strontium, salicylate 543-94-2, Strontium acetate 592-89-2, 813-97-8 Strontium formate 814-95-9, Strontium oxalate 868-19-9, Strontium tartrate, biological studies 1314-11-0, Strontium oxide, biological studies 1314-18-7, Strontium peroxide 1314-96-1, Strontium sulfide 1633-05-2, Strontium carbonate 2188-25-2, Strontium benzoate 10042-76-9, Strontium nitrate 10196-69-7, Strontium stearate 7100-64-3, Strontium bicarbonate 10101-21-0, Strontium gluconate 10196-69-7, Strontium stear 10476-85-4, Strontium chloride 12060-59-2, Strontium titana 13451-01-9, Strontium bisulfate 13470-06-9, Strontium nitri 13703-84-9, Strontium borate 14796-93-1, Strontium laurate 12060-59-2, Strontium titanate 13470-06-9, Strontium nitrite 14796-94-2, Strontium myristate 14796-95-3, Strontium palmitate 14987-70-3, 15578-33-3 17006-00-7 Strontium behenate 16088-89-4 23287-50-5, Strontium propionate 18480-07-4, Strontium hydroxide 29870-99-3, Strontium lactate 39162-74-8 40472-00-2 59039-08-6, 59640-09-4, Strontium phthalate 63387-34-8, Strontium Strontium oleate 74563-70-5 88092-77-7 thioglycolate 139965-15-4 303730-87-2 303730-89-4 303730-90-7 303730-91-8 303730-92-9 303730-88-3 304006-79-9 304006-80-2

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) (strontium compds. for reducing skin irritation due to ingredients in compns.)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

(1) Anon; FR 2590273 1987 HCAPLUS

KOSS

```
(2) Anon; EP 0654270 1995 HCAPLUS
(3) Anon; The Merck Index, 11th Ed 1989, P1394
(4) Biener; US 4943432 1990 HCAPLUS
(5) Bilotto; Pain 1988, V32, P231 HCAPLUS
(6) Breton; US 5851556 1998 HCAPLUS
(7) Celerier; Arch Dermatol Res 1985, V287, P680
(8) Chess; US 4971800 1990 HCAPLUS
(9) de Lacharriere; US 5824650 1998 HCAPLUS
(10) de Lacharriere; US 5866168 1999 HCAPLUS
(11) de Lacharriere; US 5972892 1999 HCAPLUS
(12) D'Alelio; US 4477439 1984 HCAPLUS
(13) Edwards; US 4285973 1981 HCAPLUS
(14) Foreman, J; J Physiol 1977, V271, P233 HCAPLUS
(15) Frankenhaeuser; J Physiol 1958, V142, P360 HCAPLUS
(16) Gutentag; Penn Dental Journal 1965, V68(2), P37 MEDLINE
(17) Hahn; US 5716625 1998 HCAPLUS
(18) Hahn; US 5804203 1998 HCAPLUS
(19) Hodosh; US 4191750 1980 HCAPLUS
(20) Klein; US 4388301 1983 HCAPLUS
(21) Mishima; US 5262153 1993 HCAPLUS
(22) Porter; US 3716054 1973
(23) Yu; US 4105782 1978 HCAPLUS
(24) Yu; US 4105783 1978
(25) Zyuzyukin, Y; 1973, 12, P100 HCAPLUS
     18480-07-4, Strontium hydroxide
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)---
        (strontium compds. for reducing skin irritation due to ingredients in
        compns.)
RN
     18480-07-4
                HCAPLUS
CN
     Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)
HO-Sr-OH .
    ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS
     1997:257488
                 HCAPLUS
ΑN
DN
     126:242597
ΤI
     Improved hair-straightening emulsion containing
     alkaline earth hydroxide
IN
     Darkwa, Adu Gyamfi; Villanueva, Apolonio Iii
PA
     Johnson Products Co., Inc., USA
SO
     PCT Int. Appl., 93 pp.
     CODEN: PIXXD2
DT
     Patent
LA.
    English
     ICM A61K007-07
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                      KIND
                                            APPLICATION NO.
                            DATE
                                                             DATE
     WO 9707775
                       Α1
                            19970306
                                            WO 1996-US13606
                                                             19960822
PΙ
         W: BR, CA, GB, MX
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
             SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD,
     US 5679327
                            19971021
                                           US 1995-519287
                                                             19950825
                       Α
```

AA

Α1

19970306

19980603

CA 1996-2230224

GB 1998-3520

19960822

19960822

CA 2230224

GB 2319787

```
GB 2319787
                       B2
                             19990825
PRAI US 1995-519287
                             19950825
     WO 1996-US13606
                             19960822
     An improved highly alk. hair-straightening emulsion
AB
     and a 2-component system for prepg. the emulsion are provided. The
     emulsion employs a combination of strong nitrogenous org. base and alkali
     metal hydroxide in the presence of an alk. earth metal cation, preferably
     with addn. of a quaternary ammonium conditioner. Neither the amt. of the
     alkali metal hydroxide nor the amt. of org. base present in the emulsion
     is sufficient by itself to effectively permanently straighten
     naturally curly hair. Alk. earth metal hydroxides are
     characteristically ineffective as permanent hair
     straighteners. However, the combination is effective for
     achieving permanent straightening of hair within a
     treatment time of .ltoreq.30-min. The emulsion also substantially avoids
     scalp skin irritation and minimizes hair discoloration and
     hair breakage. Thus, a cream emulsion contg. petrolatum 15,
mineral oil 10, cetearyl alc. 11, modified hectorite clay gellant 2,
     Miranol DM (amphoteric emulsifier) 0.5, ethoxylated lanolin 1.5, propylene
     glycol 5, Polyquaternium-6 (conditioner) 1.26, Ca(oh)2 2.5, LiOH.h2O 1.25,
     perfume, and H2O to 100 wt.% was converted to a hair-
     straightening emulsion by mixing 3.5-5 parts cream emulsion with 1
     part liq. activator component contg. 10-20 wt.% guanidine carbonate.
     hair straightening emulsion alkali alk earth;
ST
     hydroxide alk earth hair straightening emulsion;
     nitrogenous base hair straightening emulsion
     Quaternary ammonium compounds, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (conditioners; improved hair-straightening emulsion
        contg. alk. earth hydroxide)
ΙT
     Hair preparations
        (emulsions; improved hair-straightening emulsion
        contg. alk. earth hydroxide)
ΙT
     Hair conditioners
        (improved hair-straightening emulsion contg. alk.
        earth hydroxide)
     Alkali metal hydroxides
IT
     Alkaline earth hydroxides
     Bases, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (improved hair-straightening emulsion contg. alk.
        earth hydroxide)
IT
     Hair preparations
        (straighteners; improved hair-straightening
        emulsion contg. alk. earth hydroxide)
     7727-37-9D, Nitrogen, org. compds.
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (bases; improved hair-straightening emulsion contg.
        alk. earth hydroxide)
     17301-53-0, Behenyltrimethylammonium chloride
ΤТ
                                                      26062-79-3,
     Polyquaternium-6
                       81646-13-1
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (conditioner; improved hair-straightening emulsion
        contg. alk. earth hydroxide)
IT
     113-00-8, Guanidine
                           113-00-8D, Guanidine, derivs. 143-37-3,
     Acetamidine
                   143-37-3D, Acetamidine, derivs. 1305-62-0, Calcium
```

hydroxide (Ca(OH)2), biological studies 1310-58-3, Potassium hydroxide, biological studies 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, biological studies—-64120-25-8 100224-74-6, Guanidine carbonate 188537-24-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(improved hair-straightening emulsion contg. alk. earth hydroxide)

ΙT 1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(improved hair-straightening emulsion contg. alk.

earth hydroxide)

1305-62-0 HCAPLUS RN

Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME) CN

HO-Ca-OH

L32 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ΑN 1983:39667 HCAPLUS

98:39667 DN-

TIOrientation of hydration products near aggregate surfaces

ΑU Grandet, J.; Ollivier, J. P.

CS Dep. Gen. Civil, Univ. Paul Sabatier, Toulouse, Fr.

SO Int. Congr. Chem. Cem., [Proc.], 7th (1980), Volume 3, VII/63-VII/68 Publisher: SEPTIMA, Paris, Fr. CODEN: 48JWAH

DT Conference

LA French

CC 58-1 (Cement, Concrete, and Related Building Materials)

- AR The oriented growth of portlandite crystals in the interfacial zone around aggregates, allowing the evolution of hair-line cracks, influences the mech. strength. The orientation of Ca(OH)2 crystals in portland cement paste hardening with different aggregates (quartz, polyethylene [9002-88-4], limestone) was studied. Successive sections of cement paste parallel to the contact interface were studied by x-ray diffraction. The curves $I = f(\log d)$ are then plotted, where I is an orientation index which is greater than 1 when the crystal is oriented and d is the distance between the contact interface and the analyzed section. I Is >1 at distances up to d0, the so-called limit of orientation, and I = f(log d) is represented by a straight line. Beyond the distance d0, the portlandite crystals have no particular orientation. Among the parameters studied, the orientation limit of the portlandite crystals depended on the amt. of mixing water, d0 increased with the water/cement ratio, and the slope of the curves $[I = f(\log d), \text{ for } (d < d0)]$ depended on the nature of the aggregate, the curing time, and the humidity of the storage medium. This slope characterizes the suitability of the aggregates to orient the portlandite crystals and their growth from the nucleus.
- ST portlandite crystal growth cement

TT Limestone, uses and miscellaneous-RL: USES (Uses)

(cement aggregates, portlandite oriented crystal growth in relation to)

IT

(portlandite oriented crystal growth in, aggregate effect on)

14808-60-7, uses and miscellaneous TT 9002-88-4 RL: USES (Uses)

```
(cement aggregates, portlandite oriented crystal growth in relation to)
ΙT
     1305-62-0, properties
    RL: PRP (Properties)
        (crystal growth of, oriented, in cement, aggregate effect on)
IT
     1305-62-0, properties
    RL: PRP (Properties)
        (crystal growth of, oriented, in cement, aggregate effect on)
RN
     1305-62-0 HCAPLUS
CN
    Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)
HO-Ca-OH
L32 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS
ΑN
    1980:135131 HCAPLUS
    92:135131
DN
ΤI
    Solid hair straightening product
ΙN
    Wajaroff, Theodor
PΑ
    Wella A.-G., Fed. Rep. Ger.
SO
    Ger. Offen., 12 pp.
    CODEN: GWXXBX
DT
    Patent
LA
    German
TC
    A61K007-09
CC
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                                                          DATE
                     ____
                                          _____
     -----
PI
    DE 2823243
                     A1
                           19791129
                                          DE 1978-2823243 19780527
    ZA 7902312
                     Α
                           19800528
                                          ZA 1979-2312
                                                           19790514
                     A
    BR 7903210
                           19791211
                                          BR 1979-3210
                                                           19790523
PRAI DE 1978-2823243
                           19780527
    A solid hair straightening compn. contained a Ca or Sr
    oxide or hydroxide and a Li, Na, or K carbonate, hydrogen carbonate,
    sulfate, or phosphate, or a Li, Na, K alcoholate together with thickeners
    and cosmetic additives. Thus, a mixt. of 10 g Ca(OH)2, 76.5 g kaolin, and
    13.5 g Na2CO3 was mixed 1:1 with water at 35.degree. to form a paste.
ST
    hair straightening prepn powder
IT
    Hair preparations
        (straighteners, powders)------
IT
    124-41-4
               141-52-6
    RL: BIOL (Biological study)
        (hair straightening compn. contg.)
TT
    18480-07-4 1305-62-0, uses and miscellaneous
    1305-78-8, uses and miscellaneous 1314-11-0, uses and miscellaneous
    RL: BIOL (Biological study)
        (hair straightening compn. contq. carbonate and)
IT
    7601-54-9 7757-82-6, uses and miscellaneous 144-55-8, uses and
    miscellaneous 497-19-8, uses and miscellaneous 554-13-2
    RL: BIOL (Biological study)
        (hair straightening compn. contg. oxide or
       hydroxide and)
TT
    18480-07-4 1305-62-0, uses and miscellaneous
    RL: BIOL (Biological study)
        (hair straightening compn. contg. carbonate and)
```

- year a retrementation that is a light to the second

Strontium hydroxide (Sr(OH)2) (9CI) (CA INDEX NAME)

18480-07-4 HCAPLUS

RN

CN

KOSS 09/931914

Page 78

HO-Sr-OH

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

НО-Са-ОН